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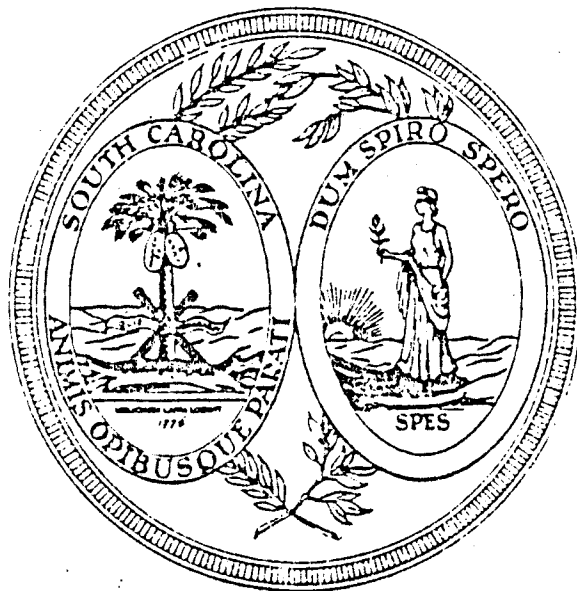
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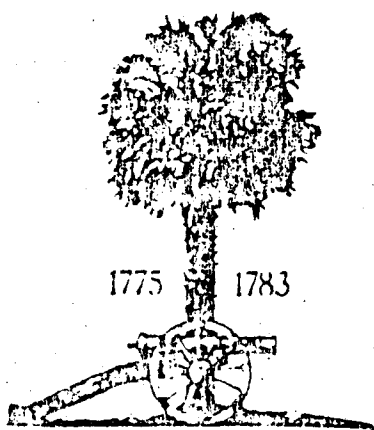
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STATE DOCUMENTS

# South Carolina General Assembly



## Legislative Audit Council



South Carolina General Assembly  
Legislative Audit Council  
A Plan For A South Carolina  
Statewide Integrated Information  
System for Human Services  
January 17, 1978

A PLAN FOR  
A  
SOUTH CAROLINA  
STATEWIDE  
INTEGRATED INFORMATION SYSTEM  
FOR  
HUMAN SERVICES

The Legislative Audit Council wishes  
to acknowledge the assistance and cooperation  
of the Legislative Council in the printing of  
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## ABSTRACT

In response to the concurrent resolution of the South Carolina General Assembly, H.2777, May 5, 1977, this report examines the inadequacies of the existing system for producing information relating to the delivery of human services which is useful for oversight, planning and accountability. It presents a plan for a statewide integrated information system for human services which is designed to improve the efficiency, effectiveness and quality of the delivery of human services. The improvement is to be achieved in part, through providing comprehensive, accurate and timely information relating to the performance of human services programs to the General Assembly.

The report also elaborates the conditions and criteria necessary to the successful implementation of a statewide human services information system.

## FOREWORD

### OBJECTIVES OF THE REPORT

The goal of the report is to identify the weaknesses of the State's current information system for human services and present a plan for a statewide information system which will aid the General Assembly in dealing with these problems. The report does not attempt to blame any single State agency or program, or group of people for the problems that exist.

The problems identified are common among human service programs nationwide. They are attributable to many sources, but primarily they were caused by the rapid growth of Federally funded programs over the last decade. South Carolina's administrative structure, its fiscal system, and its managerial structures were ill prepared to handle efficiently the hundreds of millions of dollars which suddenly began to pour into the State.

The report points out that this rapid expansion in Federal funding has contributed to 1) a lack of coordination in planning for and the delivery of human services, 2) a decline in the accountability of agency management to the General Assembly, 3) a lack of coordination in the development of data processing support services for social programs, and 4) an erosion of the General Assembly's ability to carryout their duties in the general overview and monitoring of the activities of State Government.

It is the opinion of the Audit Council that the absence of an adequate information system for the General Assembly has contributed significantly to each of these conditions. Further, if the State had an adequate human services information system, the General Assembly could address these problems more effectively.

### SCOPE OF THE REPORT

Concurrent Resolution H.2777, directed the Audit Council to develop a plan for a "statewide integrated information system for human services." The resolution also specified certain areas for the Audit Council to examine in the course of developing the plan. In general, the thrust of the examination was to review weaknesses, inefficiencies, and other problems associated with the delivery of human services under the existing system. During this general review the adequacy of existing procedures for providing information to the General Assembly which could alert the membership to problems and aid them in developing policies to deal with the problems was also examined.

It is clearly evident that the current procedures for providing information to the General Assembly about human services are incomplete, lack continuity, and are generally inadequate for State-level decision-making. As was stated in the introduction to the first report to the General Assembly under the Fiscal Accountability Act:

Millions of tax dollars are spent annually on the capture, transmission, processing, and storage of voluminous quantities of data. In spite of the State's large investment in data processing resources, virtually none of this data is transformed into concise summary information that is useful to the General Assembly for oversight, evaluation, public accountability, and planning purposes.

This statement is doubly applicable in the area of human services and it also applies to non-automated data collection activities. Therefore, the discussions which follow are intended to be straight-forward analytical statements which identify and criticize the failure of existing procedures to generate information useful to the General Assembly. The plan and its accompanying recommendations are intended to aid in correcting this condition.

#### METHODOLOGY

In preparing this report the staff of the Audit Council reviewed a variety of information systems in other States, in the Federal Government, and within South Carolina. Municipal, county and regional systems within states were also examined.

Interviews were conducted with personnel from the Federal Government, other States, and South Carolina in both the public and private sectors. A one day workshop was held for approximately 75 participants to discuss the optimal design for a statewide plan for an integrated information system for human services. Participants were invited from 34 State agencies. They included administrators, academicians, financial management officers, data processing directors, social services program administrators, research analysts, and staff from Legislative committees and the State Reorganization Commission. After the workshop, participants continued to provide an abundance of follow-up commentary.

The State Reorganization Commission's subcommittee on Information and Paperwork and the subcommittee on Education, Health, and Welfare have provided helpful input. Discussions were held also with the Comptroller General and the State Auditor. The Division of Computer Systems Management has been particularly helpful in supplying both data and technical advice.



## ORGANIZATION OF THE REPORT

The organization of this report is intended to 1) emphasize the inadequacies in the current systems for providing human services information to the General Assembly, 2) outline the ideal attributes for a statewide information system for human services, 3) define the conditions which the Audit Council feels are necessary for successful implementation of a statewide information system, 4) present an implementation schedule for the plan containing cost estimates, and 5) present a plan for an optimum statewide integrated information system for human services.

Chapter I is an introduction which provides a definition of human services. Chapter II discusses the inadequacies of the existing system and presents the analysis of the six areas cited in the Resolution to be examined by the Audit Council. Chapter III discusses the uses of information systems, the preconditions necessary for their successful implementation, and contains an overview of the implementation schedule with points to be considered for inclusion in the enabling legislation. Chapter IV contains the detailed implementation schedule, a detailed discussion of estimated costs, and the detailed plan for a centralized statewide integrated information system for human services. Chapter V concludes the report with a summary of recommendations and a review of the major obstacles to successful implementation.

CHAPTER I  
INTRODUCTION AND DEFINITIONS

The concurrent resolution (see Appendix 1) states that the General Assembly is aware of the existence of several problems related to the delivery of human services. The resolution directs the Audit Council to examine these problems and develop a plan for a centralized statewide integrated information system for human services. This chapter contains an explanation of the definition of human services used by the Audit Council and discusses its application to State agencies in South Carolina.

DEFINITION OF HUMAN SERVICES

There are many useful ways to define human services. The Audit Council's task has been to develop an operational definition of human services that fits the intent of the resolution. Usually, human services definitions are developed from an effort to place the entire target population into categories of needs. This was the approach selected by the Council of State Governments (CSG) after a two-year study, Human Services: A Framework for Decision-Making. (CSG; Lexington, Kentucky; 1975; 45 pp.) The framework developed in the CSG report, which the Audit Council found to be most useful, was used to define human services in South Carolina.

The Council of State Governments (CSG) reported the following:

One of the problems observed during the two years has been the difficulty general-purpose government officials have in understanding and making decisions about the human services delivery system. This problem is exacerbated by the absence of a basis for communication between these officials and the professionals who administer human service programs. The objective, then of this report is to describe a framework which can be utilized to establish communication between general-purpose government officials and human service professionals, and to establish a basis for making the critical decisions which affect human services programs and the clients they serve. This proposed framework is only a tentative first step in meeting these objectives. Depending on needs and resources, a state or local government may utilize some variation of this framework.

List 1 below provides the definitions of the thirteen categories of client services which were developed during the CSG study.

### LIST 1

#### DESCRIPTION OF CLIENT GROUP CATEGORIES

**Acutely Ill:** The acutely ill person has a physical or mental problem requiring immediate curative treatment. The illness may be caused by a virus or some other external agent, the malfunction of various organs, or bodily damage caused by an accident. Such an illness is a condition that has lasted less than three months and has involved either medical attention or restricted activity.

**Alcoholic:** An alcoholic is an individual with a condition characterized by preoccupation with alcohol and loss of control over its consumption such as to lead usually to intoxication. This condition ordinarily interferes with the person's total health, job, and family situation.

**Chronically Ill:** The chronically ill person has a physical or mental illness, disease, or disability that requires continuing care. Chronic illness comprises all impairments which have one or more of the following characteristics: are permanent, leave residual disability, require special training of the patient for rehabilitation, and may be expected to require a long period of supervision or observation.

**Drug Abuser:** The drug abuser has a problem with drugs to the extent that it adversely affects his ability to perform in daily life.

**Handicapped:** The handicapped person has a physical or mental impairment as the result of a birth defect, chronic disease, or accident. Such impairments may be neurologic in nature, such as blindness or paralysis. They may also be musculoskeletal disabilities such as those caused by amputation of a limb.

**Mentally Ill:** The mentally ill individual has continuous or periodic episodes of depression, acute anxiety attacks, personality disorders, psychosis, or relationship disorders.

**Mentally Retarded:** Mental retardation refers to significantly subaverage general intellectual functioning which exists concurrently with difficulty in adjusting to one's environment. It is generally manifested during the early childhood period.

**Neglected and Abused Child:** The neglected or abused child is any child whose health and development are impaired or endangered for reasons of physical assault or a failure to provide adequate care and protection. The child is under legal age (18 in most States), and is dependent upon others for support and protection.

**Public Offender:** The public offender is an individual who has a criminal record and is of legal age (18 in most States).

**Poor:** The individual is considered poor if he has basic needs that cannot be met by his available resources.

**Retired and Aged:** The aged man and retired group includes all persons over 65 and those under 65 who have retired.

**Troubled Youth:** The troubled youth is an individual who is under the age of 18 and has become involved with the juvenile justice system. This involvement may have resulted in a formal charge of misconduct and legal adjudication in the courts or the informal disposition of the charge based on a consideration of the juvenile's background and personal needs.

**Unemployed:** The unemployed individual has needed skills or the capacity to acquire needed skills but is unable to find suitable employment.

These client group categories also represent a comprehensive listing of human problems. At some point in their lives, a large portion of the public will need help in dealing with one or more

of these problem areas. The government provides support and assistance to those individuals who do not possess the independent means to resolve their problems. However, the individual, or an authorized representative, must apply for the Government's aid. The Government then verifies the need of the individual. Subject to the verification process, the government will provide service(s) to alleviate the problem.

These steps in the human services delivery process provide a basis for a broad definition of human services agencies. A human service agency can be defined as one that delivers services in one or more of the thirteen categories and is also involved in the receipt of applications and verification of needs. The Audit Council has found eighteen State agencies (see Table 1, p. 9) which possess all three of these characteristics. Two other agencies and one program may be included if the General Assembly chooses to make an exception to the definition.

If this definition is strictly applied, however, two of the agencies, Department of Corrections and the Probation, Pardon and Parole Board, may be deleted because they are part of the criminal justice or "public offender" category. These clients seldom apply for the services they are receiving from the State but are committed to them by the courts or are referred into the services through some court related procedure. The Department of Youth Services and the Department of Juvenile Placement and Aftercare also possibly could be deleted from the proposed systems for this reason. However, they could be included because their clients come under the category of "Troubled Youth." This decision could result in deleting the client category "Public Offender" from the operational definition of human services.

The Employment Security Commission and the CETA program, which is administered by the Division of Administration, could also be deleted from the list of twenty-one human services agencies because much of their activity is handled through political subdivisions. Further, the administration of both programs is influenced through heavy direct involvement of the Federal Government.

The inclusion of all of these agencies in an integrated information system will facilitate client tracking and improve the ability to evaluate the overall adequacy of the State's services to those in need. Client-tracking is essential in those human services programs where the goal is to upgrade the client's capabilities and thus get clients out of the system.

The Council of State Governments concluded that "The effects of long-term unemployment most probably contribute to the problems associated with other target groups, such as the poor, troubled youth, public offenders, and the mentally ill" (p.28, CSG, *ibid.*) This should be considered with respect to the inclusion of the Employment Security Commission and the CETA program in a statewide information system.

Although the phase-in schedule in Chapter 3 includes all twenty-one activities, Table 2 (p. 10) displays some alternatives to a total involvement by each of the twenty-one. It is not intended to be an exhaustive list of viable options. The twenty-one agencies in Table 1 (p. 11) are used throughout this paper as examples. It should be emphasized that the final decision regarding the agencies to be included should be made by the General Assembly.

TABLE 1  
HUMAN SERVICES AGENCIES

1. Advisory Board for Review of Foster Care of Children
2. Aging, Commission on
3. Alcohol and Drug Abuse, Commission on
4. Blind, Commission for the
5. Children's Bureau
6. Corrections, Department of
7. Deaf and Blind, School for the
8. Employment Security Commission
9. Governor's Office: Division of Administration, CETA Program
10. Health and Environmental Control, Department of
11. Higher Education, Tuition Grants Committee
12. John De La Howe School
13. Juvenile Placement and Aftercare, Department of
14. Mental Health, Department of
15. Mental Retardation, Department of
16. Opportunity School, Wil Lou Gray
17. Probation, Pardon and Parole Board
18. Social Services, Department of
19. Veterans Affairs, Department of
20. Vocational Rehabilitation, Department of
21. Youth Services, Department of

TABLE 2

## OPTIONAL GROUPINGS OF HUMAN SERVICES AGENCIES

Option A Comprehensive Participation	Option B Modified: Public Offender Category Deleted	Option C Modified: Unemployed Category Deleted	Option D Modified: Public Offender, Unemployed and Selected Education Related Categories Deleted
<ol style="list-style-type: none"> <li>1. Advisory Board for Review of Foster Care of Children</li> <li>2. Aging, Commission on</li> <li>3. Alcohol &amp; Drug Abuse, Comm. on</li> <li>4. Blind, Commission for the</li> <li>5. Children's Bureau</li> <li>6. Corrections, Department of</li> <li>7. Deaf &amp; Blind, School for the</li> <li>8. Employment Security Commission</li> <li>9. DOA: CETA</li> <li>10. Health &amp; Environmental Control, Department of</li> <li>11. Higher Education, Tuition Grants Committee</li> <li>12. John De La Howe School</li> <li>13. Juvenile Placement and Aftercare, Department of</li> <li>14. Mental Health, Department of</li> <li>15. Mental Retardation, Dept. of</li> <li>16. Opportunity School, Wil Lou Gray</li> <li>17. Probation, Parole &amp; Pardon Bd.</li> <li>18. Social Services, Department of</li> <li>19. Veterans Affairs, Department of</li> <li>20. Vocational Rehabilitation, Department of</li> <li>21. Youth Services, Department of</li> </ol>	<ol style="list-style-type: none"> <li>1. Advisory Board for Review of Foster Care of Children</li> <li>2. Aging, Commission on</li> <li>3. Alcohol &amp; Drug Abuse, Comm. on</li> <li>4. Blind, Commission for the</li> <li>5. Children's Bureau</li> <li>6. Deaf &amp; Blind, School for the</li> <li>7. Employment Security Commission</li> <li>8. DOA: CETA</li> <li>9. Health &amp; Environmental Control, Department of</li> <li>10. Higher Education, Tuition Grants Committee</li> <li>11. John De La Howe School</li> <li>12. Juvenile Placement and Aftercare, Department of</li> <li>13. Mental Health, Department of</li> <li>14. Mental Retardation, Dept. of</li> <li>15. Opportunity School, Wil Lou Gray</li> <li>16. Social Services, Department of</li> <li>17. Veterans Affairs, Department of</li> <li>18. Vocational Rehabilitation, Department of</li> <li>19. Youth Services, Department of</li> </ol>	<ol style="list-style-type: none"> <li>1. Advisory Board for Review of Foster Care of Children</li> <li>2. Aging, Commission on</li> <li>3. Alcohol &amp; Drug Abuse, Comm. on</li> <li>4. Blind, Commission for the</li> <li>5. Children's Bureau</li> <li>6. Corrections, Department of</li> <li>7. Deaf &amp; Blind, School for the</li> <li>8. Health &amp; Environmental Control, Department of</li> <li>9. Higher Education, Tuition Grants Committee</li> <li>10. John De La Howe School</li> <li>11. Juvenile Placement and Aftercare, Department of</li> <li>12. Mental Health, Department of</li> <li>13. Mental Retardation, Dept. of</li> <li>14. Opportunity School, Wil Lou Gray</li> <li>15. Probation, Parole &amp; Pardon Bd.</li> <li>16. Social Services, Department of</li> <li>17. Veterans Affairs, Department of</li> <li>18. Vocational Rehabilitation, Department of</li> <li>19. Youth Services, Department of</li> </ol>	<ol style="list-style-type: none"> <li>1. Advisory Board for Review of Foster Care of Children</li> <li>2. Aging, Commission on</li> <li>3. Alcohol &amp; Drug Abuse, Comm. on</li> <li>4. Blind, Commission for the</li> <li>5. Children's Bureau</li> <li>6. Deaf &amp; Blind, School for the</li> <li>7. Health &amp; Environmental Control, Department of</li> <li>8. Juvenile Placement and Aftercare, Department of</li> <li>9. Mental Health, Department of</li> <li>10. Mental Retardation, Department of</li> <li>11. Social Services, Department of</li> <li>12. Veterans Affairs, Department of</li> <li>13. Youth Services, Department of</li> </ol>

## CHAPTER II

### EXAMINATION OF EXISTING CONDITIONS

A major part of the resolution was the directive to examine six specific areas involving human services delivery and the current management of human services information resources. This chapter discusses each of these points in order with the exception that the first area "information utilized by other states" is reviewed at the end of the chapter.

#### INTRODUCTION

The Budget and Control Board was created in 1950. Other than some increase in size, its management structure has not changed significantly. However, there has been dramatic increase in the number, size and complexity of programs and agencies in State Government since the formation of the Board. The growth in the State budget and the growth in the Federal share of it should be adequate indication that administrative and management problems have accompanied the expansion of government. In FY 50-51 the total budgetary expenditures for the State were \$134.4 million. Only \$28.3 million came from Federal funds. In FY 76-77 the total State budget was approximately \$2.2 billion and approximately \$717.8 million of this amount was Federal funds. This represents an increase of over 1,500% in total budget and over a 2,500% increase in the Federal share.

This rapid growth rate in State Government size reflects the State's successful commitment to industrial and economic development. It also reflects the commitment of both Federal and State Government to expand efforts to meet the needs of citizens, particularly in the area of human services. At the same time the public has increased its demands on Legislatures to maintain effective oversight over these activities. These new and complex responsibilities have raised many new issues and problems in the management of information resources for Legislatures. The effectiveness of any large, complex organization is related to its ability to operate in an efficient and economical manner. Before the General Assembly can ensure that State Government is operating efficiently and effectively, it must receive timely and accurate information about the operations of State Government.



DOES THE POTENTIAL FOR FRAUD AND OTHER ILLEGAL  
OR UNETHICAL PRACTICES EXIST UNDER THE CURRENT SYSTEM?

South Carolina currently does not possess information systems, management structures or adequate fraud and abuse detection mechanisms to determine the level of fraud and abuse that exists in the State's human services delivery programs. The State's management structures and information producing systems have not adjusted adequately to meet the demands for oversight related to the enormous growth in human services programs. For example, the South Carolina Department of Social Services is currently the only State human services agency possessing a unit specifically assigned to detection and prevention of fraud and abuse. The scope of its work is too limited for adequate protection of public funds.

The Department of Social Services and the Department of Health and Environmental Control are responsible for administering major portions of the funds allocated to human services. The combined budgets of these two agencies for FY 76-77 totaled \$503.2 million. This was 63.8% of the total funds allocated to human services in South Carolina for FY 76-77 (see Table 3, p. 46) and it is 22.8% of the total \$2.2 billion State budget for FY 76-77.

Because of the size of the funds involved and their vulnerability to fraud and abuse, and because of the Audit Council's experiences in reviewing the management of the Medicaid program, the review of the potential for fraud and abuse focuses heavily on these two agencies. However, Department of Social Services has sole responsibility for administration of the Medicaid program in South Carolina.

The Department of Health, Education and Welfare (HEW) estimated in 1976 that nationally, 5% of the Medicaid expenditures were either fraudulent or went to ineligible cases. If a 5% figure were used in South Carolina, illegal or fraudulent expenditures in Medicaid alone could exceed \$5 million per year.

Based on new documentation, HEW since has raised its estimate of fraudulent or illegal Medicaid expenditures from \$1.5 billion to \$2 billion annually nationwide. South Carolina's current system for

identifying and referring cases of suspected fraud in human services is so weak that reliable estimates of losses cannot be made. For example, in just two of the programs administered by DSS, Title XX and Title XIX, the Fraud and Abuse Division estimates that there are three cases of fraud and abuse that go undetected for each case that is reported from the county DSS offices.

A fuller discussion of the State's deficiencies in the detection of fraud and abuse in the Medicaid program can be found in the January 1977 audit report, Management Audit of South Carolina Department of Social Services Medicaid Program.

Recently HEW carried out an ambitious project which involved the use of computers in reviewing 250 million bills submitted for Medicaid reimbursement during 1976. Forty-seven thousand of these bills were flagged as suspicious. HEW then initiated the investigation of the 2,500 most suspicious cases, 50 in each state.

Subsequent review of the HEW computer programs revealed a number of discrepancies, however. One type of distortion arose from the high frequency of billing that goes to several physicians through a clinic where only one physician's license number is used in the billing procedure. According to the South Carolina Medical Association, HEW has since acknowledged a distortion in the initial estimate of the level of fraud and abuse among physicians and druggists. When doing so, HEW attributed excessive costs to bad management in Medicaid at the State level.

This incident emphasizes two points. First, due to the size of Medicaid, the potential for fraud and abuse to occur and its potential impact on the taxpayer is staggering. Second, even if a management information system and its fraud and abuse detection procedures are aided by sophisticated computer technology unless it is extremely well managed, its effectiveness will be limited.

A serious problem recently brought to light by the South Carolina Medical Care Foundation (SCMCF) provides a good example of a properly used management information system. Their recently implemented system is dedicated to assessing the quality of care patients receive through Medicaid and Medicare and reviewing institutional utilization involving both hospitals and nursing homes.

The problem is the wasteful method through which the drugs needed by nursing home patients are acquired in many nursing homes. The

current practice encourages a "patient-to-pharmacist" relationship in acquiring prescription drugs rather than encouraging bulk purchasing. Prescriptions are renewed every 30 days. The pharmacist receives \$1.90 for each prescription renewal. Prescriptions often include such medicines as aspirin and Milk of Magnesia. The expense is compounded by the physicians' attempts to transfer as much of the cost as possible to the Medicaid and Medicare programs. The physicians tend to include in the prescriptions any medicines that their nursing home patients might need in order to ensure their immediate availability for the patients.

The full extent of this practice is not yet known because not all of the nursing homes have been reviewed. However, the officials indicated that sufficient evidence has already been accumulated to establish this problem as a trend among nursing homes.

The solution they recommended is to insist on the establishment of "nursing home-to-pharmacy" bulk purchasing relationships in the acquisition of selected prescription medicines. Officials from SCMCF further stated that they were unable to obtain a statutory reference from DSS which explained why DSS encourages this wasteful practice.

One of the most effective aids in prevention and detection of fraud and abuse is a unique identifier number for each client which could be used consistently across all client records in programs where the client receives services. The Audit Council found no situations where a unique identifier is used across programs in human services in South Carolina. Interviews with the staff involved with implementing the Title XX computerized records systems and the Medicaid Management Information System (MIS), indicate that even these two systems, administered within the same agency, do not have provisions for a unique identifier common to both programs for each client who receives services under both programs.

In addition, among other State programs where client identification numbers or case management numbers are assigned, the client data files and/or numbers are seldom shared or accessed across agency or program lines.

It has not been determined to what extent the absence of a unique identifier enhances the potential for fraud and abuse but it

significantly inhibits detection and prevention efforts. The use of a unique identifier would aid in reducing the Fraud and Abuse Division's estimate of three cases of fraud and abuse that go undetected for each case that is reported from the county DSS offices.

The unique identifier can facilitate efficient client-tracking and incisive analysis of patterns of services received, and permits application of a variety of methodologies useful in fraud detection. Properly used it also can greatly facilitate planning and budgeting for program development and program performance evaluation. It also can cause a significant reduction in the duplication, delay, and the "red-tape" clients must go through in applying for services under different programs.

The potential for fraud and abuse by providers, in other programs as well as in Medicaid, also has been addressed critically in recent audit reports at the Federal and State level. There are many types of providers, including commercial vendors. The potential types of fraud and abuse that may occur among providers of services have to do with (a) overbilling; (b) billing for services never received; (c) duplicate billing; (d) referral of clients from one provider to another unnecessarily with subsequent inflation of costs associated with a service or treatment; and (e) providing services or treatment of questionable necessity.

The potential for fraud and abuse by providers also was addressed critically in the January 1977 audit report on the Medicaid program's management. The Audit Council concludes that the extent to which fraud and abuse actually occurs in the areas cited above in South Carolina is impossible to determine because of the inadequacy of existing procedures, policies, and detection mechanisms.

In evaluating these conditions the most important criteria is that responsible management of public funds requires that effective mechanisms and procedures for the detection and prosecution of fraud and abuse be established. Inadequate measures for the detection of fraud and abuse can result in significant waste of public funds, inhibit the delivery of adequate services to those genuinely in need, and undermine public confidence in the ability of elected officials to adequately monitor the expenditure of public funds.

There are also hidden costs and non-quantifiable costs associated with fraud and abuse in the area of human services. For example, the

rising cost of human services' delivery has lead inevitably toward requests to increase appropriations which ultimately raise costs to citizens. Recent widespread scandals involving fraud and abuse among professionals in health care fields have established for many citizens a kind of stigma or suspicion toward these professions which is harmful to professional pride and morale. Some recent commentaries have suggested that this atmosphere is harmful to the trust, confidence and respect that has traditionally characterized the relationship between patients and health care professionals.

When interviewed, officials from the South Carolina Medical Association (SCMA) and the Medical Care Foundation confirmed the concern of the medical community over these problems. They also expressed concern over the rapidly rising costs of health care and the impediments to efficient delivery posed by the red tape associated with Medicaid and Medicare.

It is obvious that the State's capabilities in the detection of fraud and abuse in human services must be expanded in order to remedy the problems caused by the inadequacies of the current system. This expansion can be accomplished in several steps.

First, the State should have an adequate information system for human services, which includes a unique client identifier. Chapter IV presents the detailed plan for a statewide integrated information system for human services.

The Medical Care Foundation has already implemented sophisticated computer-based programs related to evaluation of the quality of care patients receive under Medicare and Medicaid. Associated with this system, the SCMA carries out a peer review of the claims submitted under Medicare. They have proposed that Medicaid be included in this process. The review process carried out by SCMCF focuses on the appropriateness of utilization of hospitals and nursing homes and on the quality of patient care under Medicaid and Medicare.

The officials from both SCMA and SCMCF indicated that the medical community would support the concept of a statewide information system for human services. They further indicated that confidence in the State's ability to handle analysis of medical services providers would be enhanced appreciably if the SCMCF were allowed to represent the interests of the medical community in the system.

In addition, a staff dedicated to detection and prosecution of fraud and abuse across all appropriate human services could be developed. The activities of the staff must be cost effective, meaning that there should be heavy emphasis on recovery of funds and on development of measures which aid in deterring fraud and abuse.

With the implementation of the information system, the General Assembly also should develop legislation which deals specifically with both provider and recipient fraud and abuse in human services programs. The implementation of measures such as the unique identifier number for clients can aid significantly.

Further, it is recommended that procedures for regularly reporting to the General Assembly on the status of fraud and abuse in human services and its detection be established. It could be included as a component of the full-scale plan for a statewide integrated information system for human services which will be presented in Chapter IV.

#### SUMMARY

South Carolina currently does not possess information systems, management structures or adequate detection mechanisms to determine the level of fraud and abuse that exists in the State's human services programs.

The cause of this condition is attributable primarily to the rapid growth rate in programs, fragmented control, lack of legislation dealing with provider and recipient fraud and abuse, failure to establish adequate mechanisms for the detection and prosecution of fraud and abuse, and in some cases, inept management.

Responsible management demands that the State have adequate protection from the possible loss or waste of public funds through fraud or other illegal or unethical practices.

The effect of not having adequate protection in human services programs against fraud and abuse is that public funds can be wasted irretrievably, the availability of services and funds for those genuinely in need may be limited, and public confidence in the ability of elected officials to maintain adequate oversight over the State's resources can be damaged severely.

In order to deal with these problems, the State's capabilities in the detection of fraud and abuse must be expanded. This can be done through several measures. Legislation dealing with fraud and abuse among providers and recipients in human services programs should be developed. An adequate staff for detection and prosecution of fraud and abuse in human services should be developed. Control measures such as the unique identifier number for each client should be implemented. An adequate human services information system with the attributes described in Chapter III and Chapter IV should be implemented.

Finally, it is recommended that procedures for regularly reporting to the General Assembly on the status of fraud and abuse in human services and its detection should be established.

IS THERE POTENTIAL FOR REDUCING THE COST OF ADMINISTERING SERVICES THROUGH THE USE OF A CENTRALIZED INFORMATION SYSTEM?

This is possibly the most speculative and difficult aspect of the resolution. There are basically two types of cost elements to be considered. The first type is made up of those elements related to the financial management of an agency and its programs. The second type is comprised of the data needs associated with the delivery of services through the programs.

The cost elements where savings can be gained either through outright reduction or through increased cost effectiveness are in personnel, data processing, and in the amount of time involved in application, eligibility certification, and service delivery. Reduction in unnecessary duplication in client, provider, and program data files is also an area for savings.

Automated data processing is a major cost element. Agencies and programs have proliferated and grown to huge size at a very rapid rate in the last decade. Data processing capabilities have also expanded rapidly as a part of this process. There is a widespread and commendable trend among agency managers to develop sophisticated management information systems (MIS) within their agencies. The MIS concept usually centers around use of a computer because of its

ability to store and manipulate voluminous quantities of data with tremendous speed and efficiency. These data processing units serve both financial management and program data needs in human services delivery. Several State agencies have already acquired independent data processing capabilities and others are moving in this direction. The State's Division of Computer Systems Management (CSM) has labored with difficulty in controlling and directing this trend. The Division has had virtually no success in compelling State agencies to coordinate the acquisition of data processing capabilities.

If an agency decides to expand an existing program or add a new one, this is a policy decision over which CSM has no influence. CSM must honor the agency's request for adequate data processing capability to support the program. The Division does, however, verify that the agency has received funding for expansion of the program. The demand then must be satisfied from the State's existing computer resources or CSM must negotiate the best possible contract for acquiring the necessary equipment or system.

It is clear that the failure to coordinate utilization of data processing as an information resource is already a major problem and it is growing.

Table 3 (p. 46) lists the 21 agencies that are defined as South Carolina human services agencies. The table shows the total budgets of these agencies and their data processing expenditures including salaries. By definition, since they are designated as human services agencies, we can say that the total of FY 76-77 budgets, \$787,704,514, is the total annual cost associated with human services in South Carolina. This is approximately 35.8% of the \$2.2 billion total State budget for FY 76-77. This can be considered a conservative estimate because some agencies, as footnoted, are renting some form of data processing services from computer facilities operated by the State which are paid for by other sources of funds available in the State.

Diagram 1, (p. 47) is a simple map displaying the location of the State's fifteen major computer facilities with a listing of which human services agencies they support. There are now basically three types of computer centers which support human services. One type is the universities' computer facilities. The second type is the Division of General Services which provides data processing support to external



users some of whom are human services agencies. The third type is the human services agency with its own computer capability which may also support other human services agencies. Twelve of the twenty-one human services agencies currently have constant access to computer support. The connections are shown in Table 4, (p. 48). Two of the twenty-one human services agencies have recently submitted requests for either major acquisition of new data processing resources or major expansion of their existing capabilities.

For a variety of reasons, the universities have been asked to take on an increasing amount of data processing work that more appropriately belongs in a production environment. The difficulties of this trend are increasing for both the universities and their external computer users.

A computer-based statewide information system of the scope envisioned in the resolution must be supported by a data processing service center which is totally dedicated to a "production" environment as opposed to an "academic" or "instructional" environment. The Division of General Services is the data processing service center for South Carolina. There has been almost total agreement among all who were interviewed that computer facilities at universities should support only the following activities: 1) instructional purposes; 2) research; 3) administrative support only for institutions of higher learning; 4) scientific and technical work that demands rare and sophisticated types of data processing support; 5) some design, development and testing of software and systems for use in governmental operations; and 6) relatively small tasks such as the operations of Legislative Information Systems.

In the context of State-level analysis the current procedures for generation of human services information are inadequate, fragmented, non-uniform, unnecessarily duplicative and uneconomical. In addition, the unfortunate impact of the trend to develop independent data processing capabilities is 1) to increase fragmentation; 2) to cause further decline in accountability and control; 3) to cause increased lack of coordination and uniformity in procedures, reporting and planning related to all programs, (including human services programs) and agency management; and 4) to cause costly and unnecessary duplication in data processing resources.

Immediate steps can be taken to address a portion of these problems.

It is the opinion of the Audit Council that cost effectiveness of funds expended for data processing in the human services area can be raised significantly through increased centralization and coordination in the storage and processing of data on clients, providers and programs. Table 5, (p. 49) will illustrate where efficiencies can be gained.

The thirteen columns represent the thirteen general categories of human problems or services as a reflection of target populations. These are the same categories that were explained in Chapter 1. The categories provide a useful framework for discussion of human services in South Carolina because they correspond closely to the current organization of the State's human services agencies. Each category has at least one State agency which defines that category as containing the agency's primary target population.

The rows are for the twenty-one human services agencies. Looking across each agency's row an (X) indicates the target population or category of human problems which is the primary focus of that agency. The slash mark (/) in a row indicates the other categories of services for which each agency's primary target population may be eligible.

The importance and usefulness of a centralized client file is emphasized through simple analysis of the column and row totals and percentages.

Note that in the 10 agencies (rows) where only one (X) appears, 5 of the 10 also show with the (/)'s that a given portion of the agencies' target population could theoretically be eligible for over

half of the remaining twelve types of services. Where a row contains more than one (X) the percentage of multiple eligibility will increase because all but one of the (X)'s will count as an additional service for which a given primary target client may also be eligible.

A similar analysis of the column totals further indicates the potential utility of a central client records system. Theoretically, for each type of human problem category (columns), there should be only one or two agencies whose primary task is to deal with this problem. In order to adequately meet the needs of a client, most human services agencies must develop a fairly comprehensive information file on each client. Currently, that client's file may or may not reflect that additional services are received from another agency. In the absence of statewide data collection standards in this area and no centralized coordinating authority, agencies are reluctant to rely upon client-related records-keeping carried on by other agencies. Therefore, each agency maintains client records in unique formats which tend to be so specialized it would be difficult to share the data across agencies. This means that it would be almost impossible to use automated procedures to perform quantitative comparative analysis or aggregate State level analysis.

In a column where there appears only one (X), Column 7 (Mentally Retarded) for example, this indicates that there is only one primary service agency (SCDMR) for this type of human problem. The number of slashes (/) in the column indicates the number of other agencies from which SCDMR's target population could also be receiving services or possibly could be eligible for services.

Looking at the total number of (/)'s in each column we can see that in 9 of the 13 categories of problems a portion of the clients may be eligible for or may be receiving services from at least 11, or 52.4%, of the 21 human services agencies.

If it were now possible to enter an accurate raw count of the clients into each of the cells in Table 5 it would be possible to answer immediately many of the questions most frequently asked by legislators, planners, program evaluators and auditors. In discussions with agency staffs it was found that with few exceptions, there is currently only a limited ability within the agencies or within programs to provide this type of data.

Interviews with the Division of Research and Statistics indicated that under the existing procedures it would not be possible for their office to provide an accurate count for each of the cells in Table 6. They further indicated that such a capability would be a highly valuable tool for providing useful information to the General Assembly and to the Budget and Control Board. The current inability of the Legislature to have access to this type of data for State-level analysis is a serious deficiency in the State's information processing.

#### ADDITIONAL CONSIDERATIONS

In analyzing the existing human services information procedures to develop potential cost effective innovations, the Audit Council determined that not only the data processing applications associated with human services have to be reviewed, but also, the data processing applications in the fiscal management area had to be considered. This was necessary in order to ensure maximum efficiency and effectiveness in the operation of the entire system.

The Comptroller General is charged by law to maintain fiscal records for the State. Currently, the Comptroller maintains an automated record of every fiscal transaction in a large number of the non-Lump Sum State agencies. This means that at least two separate sets and in many cases identical sets of fiscal records are being maintained. The maintenance of duplicate accounting ledgers in State agencies constitutes an unnecessary and wasteful duplication.

Through discussions with the Comptroller General and State Auditor it was indicated that when the State's new accounting system is installed, the State's financial management system will have the capability to provide all financial records necessary for all State agencies, excluding the institutions of higher learning.

The Audit Council recommends that the Comptroller General's Office assume full responsibility for maintenance of the agency ledgers for which it currently has the necessary detail. The conversion would be phased in according to a schedule developed by the Comptroller's Office in consultation with the State Auditor. The Comptroller and the State Auditor must determine if it would be more cost effective to convert the bookkeeping procedures after the implementation of the new State accounting system rather than before the new accounting system is implemented.

Each of the designated agencies will maintain only the documentation necessary for reconciliation with the monthly budget and expenditure status reports that will be furnished to them by the Comptroller's Office. The agencies' records-keeping procedures will be carried out in a uniform manner consistent with generally accepted accounting and fiscal management practices as prescribed by the Office of the State Auditor in consultation with the Comptroller General.

After discussions with the State Auditor, the Comptroller General and the Division of Computer Systems Management, the Audit Council feels that this procedure 1) could reduce agency administrative costs; 2) would reduce unnecessary duplication in bookkeeping; 3) would facilitate uniformity in fiscal records-keeping; 4) could enhance fiscal oversight and control; 5) would increase the level of accountability in agencies; 6) would aid significantly in containing the thrust among agencies to acquire independent data processing capabilities; 7) is within the existing data processing equipment capabilities of the Financial Data Processing Division that serves the Auditor's Office, the Comptroller General's Office, and the Treasurer's Office; and 8) could be implemented economically with little delay.

The centralization of certain bookkeeping activities in the Comptroller's Office could further reduce administrative accounting costs within selected human services agencies participating in the information system. Centralization of bookkeeping would complement the functioning of the human services information system. The integrated information system would produce the type of program management information needed by agency directors without each agency having to acquire its own computer capability. This concept is discussed again in the detailed discussion of the full-scale plan for a statewide integrated information system for human services in Chapter IV.

It should be understood that this procedure could be implemented whether or not the General Assembly chooses to pursue the implementation of a statewide integrated human services information system.

## SUMMARY

There is inadequate coordination in the development of agency service programs which have an impact on data processing requirements. There is a lack of interagency coordination in planning for acquisition and development of computer hardware and software. Universities have been asked to take on an increasing amount of data processing work that more appropriately belongs in a production environment.

There is a general failure of the current system to generate statistical data about human services which is of maximum usefulness for policy analysis, program evaluation, planning, and decision-making at the State-level. Related to this condition is the issue of the level of unnecessary duplication in client records and provider records which are stored across agencies. There is also unnecessary duplication in the maintenance of detailed accounting records by many agencies.

These undesirable conditions, were caused by the proliferation of agency programs and their growth without benefit of a central State planning or coordinating body. Their growth generally reflects the pattern of Federal funding, not of State planning. Requirements for data processing support, as they arose, were channelled toward whatever existing computer facilities were available that could support the need most economically. As the rate of demand outgrew the availability of the State's existing computer facilities, large agencies began to develop their own computer capability. As computer-based management systems were developing in the agencies, the State did not develop requirements for standardization in data. No policies were developed in the area of computer usage which mandated that State-level information needs be defined and then planned for and budgeted for as a management resource.

In order for large complex organizations to operate efficiently and effectively, management at the policy level must have comprehensive, accurate information about the performance of the organization presented in a timely, economical, and usable manner.

The lack of interagency coordination in the development of service programs leads to uncoordinated acquisition of computer hardware and

software, unnecessary duplication in the internal development of software, and fragmented utilization of the State's data processing resources. The expenditures for data processing will continue to rise with no significant improvement in meeting legislative needs for information useful in oversight and no major improvement in the State's present inability to evaluate the performance of human services programs quickly and economically unless corrective measures are taken.

Resolution of many of the undesirable conditions discussed above can be accomplished through implementation of the measures presented in Chapter III. In addition, the elimination of unnecessary duplication in the maintenance of accounting records can be expedited through legislative direction. It is recommended that legislation be enacted requiring all agencies to cooperate with the Comptroller General in eliminating unnecessary duplication in fiscal records-keeping.

#### WHAT IS THE DEGREE OF CLIENT SATISFACTION UNDER THE CURRENT SYSTEM?

Client impact analysis is considered to be a basic component of program performance evaluation. A May 1977 publication by the Urban Institute stated that "Some may consider client satisfaction to be the major test of service delivery."

In client analysis, services are analyzed and clients are surveyed to determine: (1) if client needs are being met; (2) what portion of the eligible client population is receiving services; (3) if the clients themselves are satisfied with the services they receive; and (4) if the clients are satisfied with the way in which services are delivered.

The Audit Council planned to review the studies of client impact analysis which had been conducted by the agencies responsible for the human services programs. This approach was thought to be comprehensive,

speedy and economical, and would also allow evaluation of the methodologies used by the agencies.

Unfortunately, it was found that of the 21 agencies designated as human services agencies, 16 or 76 percent employed no means of measuring client satisfaction and of the 7 that did, only 2 conducted this type of analysis on a regular and comprehensive basis. Table 6 (p. 50) reflects the current status of client impact analysis efforts among South Carolina human services agencies.

However, 6 of the 16 agencies expressed a need for such a survey within their agency. Common problems cited for not employing client satisfaction surveys include: 1) lack of trained personnel; 2) funding problems; 3) nature of clients (mentally retarded); 4) validity problems; 5) nature of jurisdiction over client (client tracking after release from program is difficult).

In evaluating those seven agencies which do utilize surveys, the surveys were found to be extremely limited in nature. Only two of the seven agencies utilize one or more in-depth survey techniques performed at regular intervals on a meaningful sample size. The other five agencies' survey techniques were categorized as: 1) too limited in scope (only dealt with one specific program); 2) limited in size (too few questions on client satisfaction); 3) not given at regular intervals; 4) information received was not properly compiled and was not utilized in policy decisions.

As with any information on individual clients, the procedure used in assuring client satisfaction also must protect the privacy of the client and guarantee confidentiality of the information each client provides. Also, clients must be assured that any information they may provide will have no bearing on an individual's case or benefits and will not be entered into case management files. A consent form is a device commonly used to help accomplish these goals. Appendix 3 displays a copy of a consent form used in Colorado which offers a useful model for South Carolina.

In addition, in regard to client satisfaction, how can a centralized information system serve to improve client satisfaction? First, if management at the policy-making level is in receipt of accurate program



performance information, it can initiate policies to improve the quality of service where needed.

Of more immediate impact on the client, a properly managed system can improve turnaround time on applications, expedite payments, reduce the number and frequency of forms to be filled out, and reduce the number of trips some clients must make in applying for and receiving services.

We can conclude that nineteen of the twenty-one human service agencies interviewed either: 1) did not have any vehicle for measuring client satisfaction, or 2) did not utilize studies to their fullest advantage.

### SUMMARY

In terms of the resolution the Legislative Audit Council finds that the level of client satisfaction under the present system cannot be accurately indicated due to lack of client impact analysis programs in the majority of cases, and the limited range of most of those surveys employed.

This conclusion points out that the Division of Research and Statistical Services must be considered as under-utilized by State human services agencies in the conduct of client impact analysis. The Division is the State agency designated to establish standards for these types of surveys and other data collection activities. Further, there are no systematic procedures for regular summary reporting to the General Assembly on the impact of human services programs on the quality of the lives of clients.

Although, client impact analysis is a component of program performance evaluation, comprehensive State-level approaches to evaluating the performance of social services programs have not previously been mandated in South Carolina. This has contributed to the current inadequacy in assessing program impacts. If the quality of life of citizens in need is to be improved by providing human services programs, procedures to measure the impact of the programs must be established.

In the absence of client impact analyses, the effect will continue to be that the General Assembly cannot be assured that funds for human services programs are accomplishing their intended goals.

Recommendations to deal with these conditions will be presented in Chapter III. It will discuss the details of implementing the information system.

#### WHAT IS THE LEVEL OF ACCOUNTABILITY IN THE EXISTING SYSTEM?

In the opinion of the Audit Council, agency accountability to the General Assembly for the performance of human services programs does not exist. This conclusion is based upon the following factors.

- (1) The limited human services program performance information which gets to the General Assembly is inconsistent, non-uniform, and generally not comparable to budgetary requests and appropriations.
- (2) The absence of any systematic way of measuring client satisfaction in nineteen of the twenty-one human services agencies further precludes accountability to the public and to the client populations of those nineteen agencies.
- (3) Even with implementation of the Fiscal Accountability Act (Act 561), it is virtually impossible under existing procedures to associate budgeting and expenditures with performance evaluation in human services programs. Although the Fiscal Accountability Act now provides expanded oversight and review of expenditures' activity, its capabilities for providing indicators of program performance have not yet been developed.
- (4) There are no statewide standards and policies for uniform collection, analysis, and presentation of human services program performance data.
- (5) Human Services information which is available is neither independently collected nor does it receive independent evaluation prior to presentation.
- (6) Agencies may receive funds from Federal and other sources which can have dramatic impact on their programs without prior Legislative or Executive Branch review.
- (7) South Carolina currently does not have a certified budget. Therefore, there is not sufficient fiscal detail available to hold agencies directly accountable for the expenditure of appropriated funds in the area of human services.

- (8) Currently there is not sufficient professional staff to conduct analysis of the limited human services data that is available. Even if human services information producing mechanisms were present, it is doubtful that adequate analysis could be accomplished with existing Legislative and Executive Branch staff resources.
- (9) Generally, in the human services programs in South Carolina there are no State established criteria or standards for program performance.
- (10) The current organizational and management structure of the State is not supportive of the concept of centralized, state level evaluation and oversight. Existing administrative mechanisms also do not provide sufficient strength for centralized management or oversight. Although the political environment is changing, it is not yet supportive of a genuinely centralized strong administrative entity which practices firm oversight and compliance enforcement.

Under the existing system agency managers are more directly accountable to boards and commissions than they are to the Executive Branch or to the General Assembly.

Generally, the boards and commissions possess no professional staff, usually meet less than monthly, and are made up of unpaid citizen members who are appointed from a variety of sources. Seldom are there any statutory requirements for specific professional qualifications or experience for board membership. Nevertheless, many of the boards and commissions have representatives who are highly respected and experienced professionals. However, the infrequency of meetings, the lack of an independent staff, and the lack of independent, objective performance information, simply does not allow them adequate resources for properly overseeing each agency's administration.

An agency director potentially can be placed in the awkward situation of having to satisfy multiple and conflicting performance demands from the agency's board, the Budget and Control Board, and the Legislature. Furthermore, since the General Assembly is not in session all year, it cannot maintain continuity in its oversight. The Assembly also does not possess an independent professionally staffed budget review office which

would be a logical place for the results of program performance analyses to be submitted to achieve continuity in oversight.

Historically in South Carolina, the Governor's Office has not been granted the authority by the Legislature to effectively manage large complex statewide human services programs. This circumstance does not appear likely to change soon.

Since the State does not have uniformly prescribed standards, goals, and definitions related to the concept of accountability, it is difficult to assess. However, there are indicators which, when viewed collectively, further warn that there are serious problems in this area. Audit reports from the State Auditor's Office in recent years and the January 1977 Legislative Audit Council's review of the management of the Medicaid program revealed significant problems in the Department of Social Services' ability to administer programs efficiently, effectively and in accordance with the intentions and the priorities of the General Assembly. In May 1977, the Legislative Audit Council's report, A Study of the Impact of Federal and Other Funding on Legislative Oversight, revealed major weaknesses in the State's existing fiscal system which interfered with and seriously weakened legislative oversight. The impact of varying interpretations of fiscal policies coupled with the weaknesses in the budgetary process lead to "numerous examples where the Legislature's authority had been circumvented and State Government in South Carolina had been expanded in non-legislated directions" (p. 7).

Of the ninety agencies reviewed, eight were selected for detailed review because of their size and their reliance on multiple sources of funds. The various fiscal problems which were the subject of the report all are related to the concept of "accountability." These problems, for the most part, were considered "systemic" problems. That is, they resulted from weaknesses in the State's budgetary process. Compounding the problems are inadequate fiscal policies which create difficulties, confusion, and misunderstanding for the agencies as well as for decision-makers at the State-level. The problems appeared in varying degrees in each of the eight agencies examined in detail. All eight of these are human services agencies.

The inadequacies in human services information procedures limit the opportunities for State-level policy-makers in the General Assembly

and the Executive Branch to be made aware of problems in the human services area. At the point when the General Assembly is finally made aware of a problem through independent sources such as audit reports, action by the General Assembly to hold agencies accountable for their shortcomings is inhibited by the system of boards and commissions. In general, the boards and commissions serve to effectively insulate the agencies from direct accountability.

It should be emphasized that these comments are a critique of faults with the existing system which inhibit accountability. The comments should in no way be interpreted as aspersions upon the dedication, integrity, and public spiritedness of the individuals who serve the State through membership on a board or commission.

### SUMMARY

Agency accountability to the General Assembly for the performance of human services programs does not exist.

A major cause of this condition is that the State does not have a comprehensive policy requiring systematic evaluations of the performance of human services programs and has no centralized human service information system for providing information to the General Assembly and the Executive Branch.

If the needs of citizens are to be met adequately and efficiently and as economically as possible, the State must have mechanisms and procedures for evaluating performance criteria in programs which deliver services.

In the absence of adequate information regarding the performance of human services programs, the General Assembly is limited in its ability to ensure that resources allocated to human services programs are being used efficiently, effectively and in the best interests of the people of South Carolina.

Recommendations designed to reduce these problems through providing better information are presented in Chapter III. Additionally, it is recommended that the Assembly give some consideration to the obstacles to accountability presented by the system of boards and commissions.

WHAT IS THE ESTIMATED COST OF "IMPLEMENTING A SYSTEM WHICH WOULD PROVIDE SAFEGUARDS AND IMPROVEMENTS IN THE AREAS MENTIONED ABOVE AND ALLOW FOR THE FREE AND EFFICIENT TRANSFER OF INFORMATION AMONG HUMAN SERVICES AGENCIES CONCERNING CLIENT ELIGIBILITY AND BACKGROUND?"

The comments in this section are related to the total cost estimates for implementing a statewide human services management information system which is supported by a single, centrally located data processing service center. The central computer facility would house a data bank holding the data on clients, providers, and programs necessary both in the delivery of services and in generating analytical reports useful for management and planning. As will be discussed in detail later, it may be possible to achieve the goals of the resolution without full-scale implementation of an information system built around a central computer facility. This of course will substantially reduce the cost estimates cited here and in the following chapter.

Four cost factors should be considered if a system using a single computer housing a common data base is to be developed.

TIME FACTOR

The time table for implementation can effect costs in several ways. A fast development and implementation schedule requires more funding on the front-end due primarily to greatly increased staff requirements. It also increases the chances for costly errors due to inadequate time for evaluation, testing, and modifications. Hidden cost increases can occur due to the shock of sudden drastic changes in procedures without adequate time for thorough training and acclimatization of personnel.

However, the transition can lose momentum if the time table is too slow. The State can find itself with the burden of maintaining two inefficient systems; the existing, largely unsatisfactory procedures which are in a state of confusion due to being phased out, and the incomplete new system which is only partially operational. This situation can have a detrimental impact on employee and client morale and can quickly undermine the legislative support necessary for the system's successful implementation. Such a situation can also lead to agencies being able to justify the continuance of their individual, uncoordinated on going growth projects.

## DEGREE OF CENTRALIZATION

The degree of centralization and the range of program services to be included in a statewide system are also cost factors to consider. A truly centralized statewide information system will require some physical reconfiguration of existing data processing resources and possibly acquisition of additional equipment. It will require system design, programming and testing. Ordinarily personnel costs associated with a new automated system are large. Personnel positions may be required in the areas of development and management of the new system. However, the information system envisioned for South Carolina will rely on rearrangement of existing human services data processing positions which will substantially reduce the need for additional costs in this area.

## PERSONNEL TRAINING

A third cost factor has to do with proper training of personnel and preparation of procedures at the local level of service delivery. A subcommittee of the State Reorganization Commission is currently considering the feasibility of centralizing client application and referral procedures with eligibility determination procedures and applicable service delivery at the local level. In general, the goal is to have a single central location at the local level where a potential client can make application for all services, receive eligibility certification for all appropriate services, and receive information related to service delivery with only one or very few trips required.

This concept is thoroughly complementary to the concept of a centralized statewide human services information system. It poses a medium cost factor in the acquisition of small computer terminal facilities at each local site which are tied into the system's data processing service center. It also poses a cost factor in properly training program personnel at the local level in the use of the system. They need to understand, generally, their role in the overall system in addition to being thoroughly familiar with simple tasks such as data entry procedures, inquiry procedures, data correction procedures, and data security procedures.

## SCOPE OF THE SYSTEM

The fourth cost factor has to do with the number and scope of the optional capabilities that can be incorporated into the system. For example, Georgia's statewide telephone oriented inquiry, information and referral system (Tie-Line) costs approximately \$350,000 annually. The State of Michigan's recently initiated NETWORK, is a much more comprehensive statewide inquiry, information and referral system using 300 remote computer terminals. It was funded \$4 million for operating costs for the first year. An optional information and referral component is incorporated into the full-scale plan for the South Carolina system.

## SUMMARY

The cost estimates for the optimum information system in South Carolina are discussed later in more detail in the implementation schedule. In general it is estimated that total design, development and implementation costs for the first two years of a 4-5 year full-scale implementation schedule would be approximately \$5 million. A majority of these costs can be covered through the transfer of existing funds from human services agencies' data processing budgets. Therefore, the plan should not require significant additional funding. This concept is discussed in more detail in Chapter IV. The annual cost for the remainder of the full-scale implementation would lower significantly after the first two years.

However, the gradual process which is recommended for implementation requires the initiating body to evaluate, after each step, to what degree further centralization of computer resources is necessary to achieve the goals of the resolution.

## WHAT ARE THE LEGAL IMPLICATIONS OF A CENTRALIZED INFORMATION SYSTEM AND WHAT IS THE POTENTIAL FOR ABUSE OF RECIPIENTS' PRIVACY AS OTHERWISE GUARANTEED BY LAW?

The Audit Council asked the Attorney General's Office for assistance in this area in the context of the resolution. After several weeks of preparation, the legal staff developed a preliminary examination of the issue: "the potential conflicts between the right of privacy and the



public's right to know with reference to the proposed central computer file of welfare recipients' records" (see Appendix 4).

The following comments from the discussion paper's introduction emphasize the limited number of legal precedents in the area of computer technology and individual privacy.

The questions presented by the development of a central computer file of the records of state welfare recipients and its impact on individual privacy are numerous and can only be answered in light of concrete cases and controversies which present specific situations of disclosure of such recorded information for particular purposes, and not through a general inquiry. Furthermore, as the Report of the Secretary of Health, Education and Welfare's Advisory Committee on Automated Personal Data Systems has noted, "There is little evidence, . . . , that court decisions will, either by invoking Constitutional rights or defining common law principles, evolve general rules, framed in terms of a legal concept of personal privacy, that will protect individuals against the potential adverse effects of personal-data record-keeping practices." R. N. Freed, Computers & Law: A Reference Work, 4th ed., 34.

Records pertaining to recipients of public welfare were emphasized in the preliminary review by the Audit Council because they seemed to be the ones most immediately involved in potential conflict between concerns of individual privacy and the Freedom of Information Act.

South Carolina does not have a Privacy Act, per se, but does have statutes dealing with the collection and disposal of data associated with recipients of public welfare. Section 43-1-150 of the 1976 Code of Laws, for example, designates the State Department of Social Services as the custodian of the records, papers, files and communications of the State and county Departments of Social Services and requires it to make and enforce "reasonable" rules governing the use and preservation of these files. The Attorney General's discussion paper goes on to make the following points.

Section 43-1-160 makes the names of recipients and the amount of welfare monies which they receive "public records" and therefore open to "public inspection" according to the State Freedom of Information Act (i.e. §30-3-10 et seq.), and it also makes criminal the use of lists of recipients for commercial or political purposes. It is the "reasonable" rules for use and preservation of the files which are made by the State Department (of Social Services) that are subject to challenge as not effectively protecting the right of privacy. To determine the reasonableness of disclosure of

such information, several questions should be answered: (1) To whom are the records to be given? (2) For what purpose will the person or group be using the files? (3) Under what circumstances is the State Department being asked to release the records?

Of direct relevance to these questions is a recent ruling from the Supreme Court of the State of New York reaffirming a New York State law which requires that "communications between a social worker and client must be afforded the same standing as that given traditional similar privileges respecting communications between attorney and client, physician and patient, and clergyman and penitent."

Discussions with the staff of the Attorney General's Office further emphasized that the relationship between privacy concerns and computerized records-keeping technology is a developing area in the law where landmark legislation could be developed.

The most important consideration seems to focus on the issue of authorized access rather than on the fact that detailed personal data is maintained in a computerized system. A properly designed automated system can incorporate any number of positive blocks and partitions in data files so that only pre-designated portions can be accessed and retrieved by only authorized persons. Generally, the point in any system most vulnerable to breach of security is through the personnel who have regular access to the system. It appears that it is in this area where insightful legislation is most needed. There needs to be a clear and reasonable definition stating which of the system's data are confidential. It should also specify in which combinations the data are to be considered confidential. The military's method of categorizing classification levels for classified weapons' components when separate and when in certain configurations could probably provide a useful model for such an effort.

In addition, within the privacy law a definition of "confidential" should be developed and logical procedures for handling of confidential material should be simply and clearly defined. Provisions for fair and reasonable treatment of public employees who may accidentally violate the security rules while acting in good faith should also be incorporated. Penalties for willful violation of the procedures for handling confidential material should also be made clear and vigorously enforced.

As an additional protection, it should be mandated that a client has the right to review any records pertaining to the client which are maintained by the State. The State must provide adequate corrective procedures if discrepancies are found. If there is a dispute as to the accuracy of human services records, it should be incumbent upon the State to verify the accuracy of the records (see Appendix 2 for a more detailed discussion of individual rights in this area based on The Report of the Privacy Protection Study Commission).

As recommended by the Attorney General's staff, the question of the State's liability needs to be addressed and defined. The obligation of the State to provide thorough training in the proper procedures for dealing with confidential material should be emphasized in the section dealing with the State's liability.

The staff of the Attorney General's Office has indicated that a feasible comprehensive model privacy statute could be developed in the context of the legislation to develop a statewide integrated information system. Such a statute would be most efficiently developed after the data elements and the manner of their storage and manipulation have been well defined in the detailed design of the system.

The Audit Council recommends that the Attorney General's Office be assigned the task of developing a model privacy statute in the context of the goals of the information system which are described in the Resolution H.2777 and in Chapter III. The Audit Council further, recommends that if the General Assembly chooses not to undertake development of a statewide information system, that the Attorney General still be directed to develop a model privacy statute for consideration by the General Assembly.

#### REVIEW OF SELECTED INFORMATION SYSTEMS IN OTHER STATES

Since 1970 many states have initiated computer-based information systems in an attempt to utilize the computer's capability to store, manipulate and retrieve data to aid in the generation of accurate, meaningful and timely information useful for oversight and decision-making. The following is an overview of five selected systems and their current status. The first three systems are almost as compre-

hensive as what is envisioned in the resolution. The last two are statewide information and referral systems which are cited because they aid persons in need to easily find out where help is available. Included in this overview is a listing of problems and successes associated with each system.

(1) Florida, Department of Health and Rehabilitative Services Project - Client Information System (CIS).

The CIS, which has existed since 1976, is a VDT or batch entry computer system which collects and stores client data to identify and track clients in the Health and Rehabilitative service delivery system. CIS utilizes client data and program information for coordination and planning of client services. Client data is entered by a caseworker via telephone or written form to a remote VDT operator who then enters the data into the system. This information is readily retrievable. In addition, a backup system consisting of microfiche, produced and updated weekly, exists in the event of computer or VDT breakdown. CIS is management oriented in that it can provide unduplicated numbers of clients being served within and across programs and generate information necessary to document service needs and plan new programs. CIS will serve 2 million clients annually when it is fully operational. Complete cost estimates are not available at this time, however, CIS has incurred costs of \$600,000 in new equipment purchases to date.

Successes - CIS has replaced 18 different automated client information systems developed between 1970-1975 which were considered fragmentary, overly expensive and generally unsatisfactory. No other information is available because CIS has just entered Phase I of implementation and only one pilot district is operational. Total implementation is expected within five years.

Problems - CIS's problem areas stem from shifting priorities, lack of coordination of agency efforts and duplication of services. These problems were, in part, caused by agency

adaptation to the recently passed Reorganization Act which mandated CIS.

(2) Mississippi, Department of Public Welfare-Project - Mississippi Social Service Information System (MSSIS).

The MSSIS is a statewide reporting and recording system initiated in 1975 which permits state and local staff to share service data for administrative, management and accountability purposes. A computerized control file is utilized where staff enters data on characteristics, service plans and service activities for individuals and cases. These files identify basic client characteristics, services being delivered, and individual client goals and objectives as developed by the client and counselor. The current population being served is 38,000 primary recipients and 44,000 secondary recipients. The project's development costs have been \$211,288. Of this, \$1,927 per month is for computer time and cost of one systems analyst. Currently, the system is processing 15,000 transactions per month.

Successes - (1) MSSIS makes possible the identification of all clients, their characteristics, goals and progress toward those goals. (2) It produces required data upon request in a quick and efficient manner. (3) Its inputs have aided county social workers in planning goals and providing services for clients. (4) The system has provided management with a method for determining and directing activity in the Social Services Division.

Problems - (1) The advent of MSSIS has demanded the retraining of county-level staff in preparation for system usage. (2) Mississippi has limited data processing capabilities and related shortages of hardware. (3) MISSIS has operated under impending fiscal constraints. (4) There is a shortage of qualified data processing staff. (5) There is increased demand for reporting and accountability to the Governor, Legislature and Budget Commission without accompanying technical expansion.

(3) New York, Department of Social Services-Project - Medicaid Management Information System (MMIS) (see Appendix 5).

The MMIS is an information storage and retrieval system which utilizes a modular concept. Each component is a separate program entity which interfaces with the existing system and interfaces with the other modules. The modules are: (1) claims processing - payment of all claims; (2) recipient - maintains detailed data on eligible recipients and their status; (3) reference - updates files; (4) provider - maintains provider eligibility and listings; (5) management and administrative reporting - produces all management reports, planning documents, fiscal documents, reports for Federal, State and local use and monitors fraud detection activities; (6) surveillance and utilization review - detects abuse of services by clients and providers, develops profiles of delivery utilization patterns and facilitates investigation of the quality of service. Entry into the system is accomplished by key entry or tape with future provisions for Optical Card Reading (OCR). Currently, there are 300 terminals with access to the data base. However, this system has the potential to add more terminals in any location in the state. In addition to MMIS, New York is moving to build a single data base for all social services; especially in regard to providing payments to clients. MMIS, which has been in the development stages for four years, will carry a potential load of 2 million cases. Development costs have totalled \$8.57 million with an annual projected operating cost of \$38.4 million when all modules are implemented. In the January 1, 1976 New York State Department of Social Services Report to the Legislature, they stated that "in the first full year of statewide operation of MMIS, there will be a savings of from \$180 million to \$288 million from what program costs would have been without the MMIS" (p.III-34).

Successes - (1) MMIS was passed by the Legislature without any dissenting votes. This is attributed to (a) the lengthy (4-year) planning and development period and (b) favorable relations maintained with local entities. (2) No other successes can be documented at this time because Phase I, insertion of provider files into the system, for just the New York City area, only began in November 1977.

Problems - (1) Existing data which has been entered into the system is incomplete. This has resulted in unnecessary and duplicative updating of files. (2) Considerable cost has been incurred in upgrading the data processing capabilities of the 58 counties involved in this project. (3) There have been problems in the coordination of the 16 State agencies which are associated in some fashion with the Medicaid program.

(4) Georgia, Department of Human Resources-Project - Tie-Line.

Tie-Line is a toll-free telephone oriented statewide information and referral system that has been in existence since 1975. Computer generated information on 10,000 public and private organizations is stored on microfiche to be used by thirteen trained counselors who provide information and referral to a client who telephones in using the Tie-Line number.

The system has the unique capability to "bridge" incoming calls. This "bridging" technique enables the counselor to directly connect a calling client's telephone line to any other line in the state for immediate referral to the appropriate information source. Tie-Line utilizes a computer to analyze aggregate data collected about clients for research and evaluation. There is a follow-up procedure to measure the client's satisfaction with both the Tie-Line referral system and the participating service delivery organizations. The cost of the current system is \$351,330.00 per year. Forty-eight thousand clients per year are served. This indicates a total annual cost per client of \$7.31.

Successes - Tie-Line has provided effective and efficient information and referral services for a large state while incurring a relatively small expenditure and has generated a useful inventory of service data and aggregate demographic data on the clients.

Problems - (1) There has been legislative resistance stemming from a concern that Tie-Line would create increased demand

on public welfare programs. To date, this has not been demonstrated. (2) Technical and monetary difficulty associated with costly updating of microfiche has lead to conversion to a manual system of storing information on index cards. (3) There has been skepticism and lack of cooperation on the part of other state agencies which have felt that Tie-Line might invade client or agency privacy or reduce agency "ownership" of clients. (4) There has been a lack of coordination and interface with existing information and referral organizations which has led to duplication of efforts and services and wasteful competition.

- (5) Michigan, Department of Social Services-Project - Human Services Network (NETWORK) (see Appendix 6).

NETWORK is a statewide on-line system of remote video display terminals (VDT) connected to a computer containing a master file which contains a listing of over 55,000 service providers and their characteristics. The 350 VDT's are located statewide in local government offices and are manned by trained operators. Anyone in the state can visit or call a terminal and receive immediate response to an inquiry. The system has the capabilities to: (1) provide referral information on available services and providers, (2) produce planning documents indicating demand trends, (3) generate geographical distribution displays of service centers, and (4) produce systems assessment/evaluation information. The funds appropriated for NETWORK'S first year of operation are \$4 million.

Successes - NETWORK'S accomplishments are not yet documented because it only became operational on October 1, 1977.

Problem - There have been problems with cooperation between other information and referral providers. This situation has been reconciled for the most part, according to the NETWORK staff.



## SUMMARY

In conclusion, the information systems cited above as well as others which have been reviewed, faced certain common obstacles to their success. Three traits stand out. First, is agency resistance to new systems and procedures not developed at the initiative of the agencies. Typically, agencies which resist view the information system as eroding agency authority while providing little or no positive results.

Second, there have been problems in coordinating the activities of the information system with those of other agencies and private sector participants in human services.

Third, some resistance has been encountered among agencies because they did not fully understand the goals of the new system, the importance of their role in the system, and the long-range benefits to be gained for agency management from the new system..

A fourth problem has been cited informally in discussions with personnel from other states and in South Carolina. It cannot be ranked accurately, but the problem has been raised consistently. It has to do in part with evaluating the managerial competency of agency management. The more competent the executive staff is, the greater is the tendency that their resistance to change is based on well-founded criticism which can be very constructive. Less qualified management groups tend to resist change citing reasons which when pursued, have basically little relevance to good management practices. However, if the system is to serve the operational needs of agencies, agency managers must thoroughly understand its operation. They must be surveyed carefully to ensure that the system is serving their program needs adequately.

Seven specific factors were identified which have helped to overcome these problems and have contributed to the successful implementation of large-scale information systems. These factors are:

- (1) The Legislatures of the States involved actively supported and solicited statewide support for the information system.
- (2) The information systems were placed under the control of skilled professional systems managers who had access to a large qualified staff.
- (3) Those managers were allowed sufficient time for developing and testing the systems.
- (4) Adequate fiscal support for the system was provided.
- (5) Strong legislation mandated development of the

systems and provided broad enforcement authority to system management which facilitated agency coordination and participation. (6) System management chose to involve local participants in the early planning and development stages of the systems and actively solicited their suggestions based upon needs assessment. (7) Adequate attention was devoted to the education of agency management and staff to ensure their understanding of the entire system and their responsibility and role within it.

TABLE 3

## TOTAL BUDGETS AND DATA PROCESSING COSTS ASSOCIATED WITH HUMAN SERVICES IN SOUTH CAROLINA

Human Service Agencies	Recommended FY 77-78 Budget	Estimated Total Funds FY 76-77 Budget	FY 76-77 D.P. Costs: Services, Hardware, Supplies	FY 76-77 D.P. Costs: Personnel	FY 76-77 Total D.P. Costs
1. Adv. Bd. for Rev. of Foster Care of Child.	\$ 193,316	\$ 205,128	-	-	-
2. Aging, Commission on	5,549,785	5,183,433	\$ 1,957.74	-	\$ 1,957.74
3. Alcohol & Drug Abuse, Commission on <sup>(1)</sup>	4,166,493	4,266,666	22,853.87	\$ 60,585	83,438.87
4. Blind, Commission for the <sup>(1)</sup>	4,075,668	3,686,868	14,237.77	15,870	30,107.77
5. Children's Bureau	580,425	534,044	-	-	-
6. Corrections, Department of <sup>(2)(3)*</sup>	30,135,275	26,039,098	239,585.24	251,967	491,552.24
7. Deaf and Blind, School for the	5,043,411	3,959,688	-	-	-
8. Employment Security Commission <sup>(3)</sup>	21,214,987	20,832,109	3,361,871.34	850,785	4,212,656.34
9. Gov.'s Office: Division of Admin. <sup>(2)(4)</sup>	53,736,334	60,375,405	109,382.08	118,069	227,451.08
10. Health & Environ. Control, Dept. of <sup>(2)</sup>	67,695,594	64,372,649	479,158.84	703,569	1,182,727.84
11. Higher Ed., Tuition Grants Committee <sup>(2)</sup>	8,828,628	7,814,505	11,315.42	7,949	19,264.42
12. John De La Howe School	1,020,987	895,029	-	-	-
13. Juvenile Placement & Aftercare, Dept. of	649,390	571,515	-	-	-
14. Mental Health, Department of <sup>(2)(3)</sup>	74,809,594	64,092,701	404,704.30	424,519	829,223.30
15. Mental Retardation, Department of <sup>(2)</sup>	49,003,508	41,197,941	62,486.39	155,908	218,394.39
16. Opportunity School, Wil Lou Gray	1,139,411	1,006,332	-	-	-
17. Probation, Pardon & Parole Board	4,005,178	3,333,226	-	-	-
18. Social Services, Department of <sup>(2)</sup>	441,294,349	438,978,004	779,250.48	977,112	1,756,362.48
19. Veterans Affairs, Department of	713,462	665,781	-	-	-
20. Vocational Rehabilitation, Dept. of <sup>(3)</sup>	30,987,507	29,778,534	161,094.92	309,015	470,109.92
21. Youth Services, Department of <sup>(2)</sup>	10,858,736	9,915,858	6,899.07	46,517	53,416.07
TOTALS	\$815,702,038	\$787,704,514	\$5,654,797.46	\$3,921,865	\$9,576,662.46
PERCENTAGES			7.17% of Total Budget	4.91% of Total Budget	12.15% of Total Budget

(1) Batch.

(2) Remote entry computer terminals.

(3) Independent computer main frame.

(4) Total DOA budget, not just CETA budget.

\* Some agencies may employ 2 or more types of computer access and may even employ 2 or more separate computer facilities.

For Human  
Services  
AgenciesFor Human  
Services  
AgenciesFor Human  
Services  
Agencies

DIAGRAM 1. DISTRIBUTION MAP OF STATE COMPUTER FACILITIES AND  
THE HUMAN SERVICES AGENCIES THEY SUPPORT.

Clemson University  
A) DSS  
B) DHEC  
C) Mental Health  
D) DOA

- 1) General Services  
A) Blind, Comm. for  
B) Corrections,  
Dept. of  
C) Div. of Admin.
- 2) USC  
A) Mental Retard.  
B) Alcohol & Drug  
Abuse  
C) DSS
- 3) Education - None
- 4) Tax - None
- 5) Highway - None
- 6) SLED  
A) Corrections,  
Dept. of  
B) DYS
- 7) Mental Health  
A) Mental Health  
B) DHEC
- 8) Voc.-Rehabilitation  
A) Voc.-Rehab.
- 9) Employment Security  
Commission  
A) Emp. Sec. Comm.
- 10) Finance - None

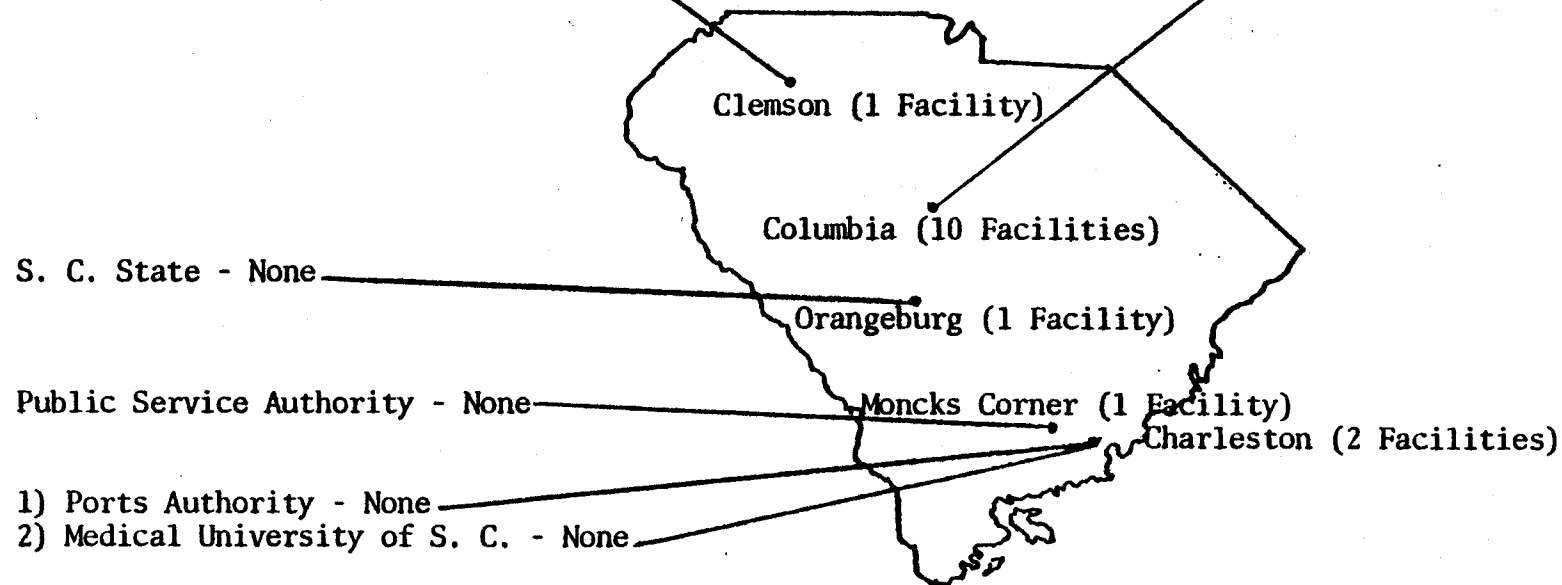


TABLE 4

## FREQUENCY OF COMPUTER SUPPORTED HUMAN SERVICES AGENCIES

HUMAN SERVICES AGENCIES	SOUTH CAROLINA'S FIFTEEN COMPUTER FACILITIES															TOTAL X'S	
	Clemson University	S. C. State College	Public Service Authority	Ports Authority	Medical University	General Services	University of S. C.	Department of Education	Tax Commission	S. C. Dept. of Highways and Public Transportation	SLED	S. C. Dept. of Mental Health	Vocational Rehabilitation	Employment Security Commission	Financial Data Processing	Higher Education, Tuition Grants Comm.	ROW TOTALS
1. Adv. Bd. for Rev. Post. Care of Child.																	
2. Aging, Commission on																	
3. Alcohol & Drug Abuse, Comm. on							X										1
4. Blind, Commission for the						X											1
5. Children's Bureau																	
6. Corrections, Department of						X					X						2
7. Deaf and Blind, School for the																	
8. Employment Security Commission														⊗			1
9. CETA - D.O.A.	X					X											2
10. Health & Environ. Control, Dept. of	X					X						X					3
11. Higher Edu., Tuition Grants Comm.																⊗	1
12. John De La Howe School																	
13. Juvenile Placement & After, Dept. of																	
14. Mental Health, Department of	X											⊗					2
15. Mental Retardation, Department of							X										1
16. Opportunity School, Wil Lou Gray																	
17. Probation, Parole & Pardon Board																	
18. Social Services, Department of	X						X										2
19. Veterans Affairs, Department of																	1
20. Vocational Rehabilitation, Dept. of													⊗				1
21. Youth Services, Department of											X						1
TOTAL	4					4	3				2	2	1	1		1	18

X = Human Service Agency (row) receives remote computer support from a facility (column).

⊗ = Human Service Agency has own computer facility.

TABLE 5

## DISTRIBUTION OF CLIENT POPULATION AMONG SERVICE CATEGORIES AND HUMAN SERVICES AGENCIES

Client Service Categories  Human Services Agencies	1	2	3	4	5	6	7	8	9	10	11	12	13	Row Totals
	Acutely Ill	Chronically Ill	Alcoholic	Drug Abuser	Handicapped	Mentally Ill	Mentally Retarded	Neglect. & Abused Child	Poor	Public Offender	Retired & Aged	Troubled Youth	Unemployed	
1. Adv. Bd. for Rev. of Foster Care of Child.								X				X		2
2. Aging, Commission on	/	/	/	/	/	/	/		/	/			/	10
3. Alcohol & Drug Abuse, Commission on		/			/	/			/		X			4
4. Blind, Commission for the	/	/		X	/	/		/	/	/		/	/	9
5. Children's Bureau*		/			X		/		/		/		/	5
6. Corrections, Department of	/	/	/	/	/	/	/	/	/	/	/	/	/	13
7. Deaf and Blind, School for the	/	/	/	/	/	/	/			X			/	1
8. Employment Security Commission					X									10
9. DQA: CETA			/	/	/	/	/	/	/	/	/	/	X	2
10. Health & Environmental Control, Dept. of		X			X				X		X			4
11. Higher Education, Tuition Grants Committee	/		/	/		/	/	/				/	/	8
12. John De La Howe School*		/			/				X				/	3
13. Juvenile Placement & Aftercare, Dept. of			/	/				X	X			X		3
14. Mental Health, Department of	X	X	X	X	X	X	/	/	/			X	/	7
15. Mental Retardation, Department of							X	/	/	/	/		/	6
16. Opportunity School, Wil Lou Gray	/	/			X	/		/	/	/	/	X	/	10
17. Probation, Parole and Pardon Board		/	/	/		/	/	/	/	/			/	9
18. Social Services, Department of			/	/				X	X		X		X	4
19. Veterans Affairs, Department of	X	X	/	/	X	X	/		X		X		X	9
20. Vocational Rehabilitation, Department of			/	/	X									3
21. Youth Services, Department of		/	/	/	/	/	/	/	/	/		/	/	1
		/	/	/	/		/			/			/	7
TOTAL X's	2	3	2	2	7	3	1	4	7	2	4	6	4	47
TOTAL /'s	7	12	13	13	11	12	14	8	13	12	7	8	14	144

\*These agencies identified "Other" categories as their primary client groups.

SOURCE: LAC survey of agency directors, October 31, 1977.

TABLE 6  
CLIENT SATISFACTION ANALYSIS PROGRAMS  
IN HUMAN SERVICES AGENCIES

Agencies	No Client Satisfaction Survey	Expressed Need for Client Survey	Has Conducted Client Satisfaction Survey	Type of Survey	
				Comprehen.	Limited
Ad. Bd. Foster Child	X				
Aging - Comm.	X	Yes			
Alcohol & Drug Abuse	X	Yes			
Blind Comm.	X	Yes			
Children's Bureau			X		X
Corrections	X				
*Deaf & Blind School			X	X	
Employment Sec. Com.	X				
DHEC			X		X
Higher Ed. Tuit. G.	X				
Juvenile Placement	X				
DQA: CETA	X				
John De La Howe Scho.	X				
Dept. Mental Health	X	Yes			
Dept. Mental Retard.	X	Yes			
Opportunity School			X		X
Probation, Parole & Pardon Bd.	X	Yes			
Dept. Social Serv.			X		X
Veteran's Affairs	X				
DYS			X		X
*Voc. Rehabilitation			X	X	
	16	6	7	2	5
*These two agencies conduct well-established and effective client survey projects which are regularly used in program management.					

SOURCE: LAC survey conducted during October 1977.

## CHAPTER III

### GOALS AND OBJECTIVES

This chapter discusses the goals of concurrent resolution (H.2777). It also describes how information systems are used, and presents five preconditions which the Legislative Audit Council feels are necessary for successful implementation of a centralized statewide information system. The remainder of the chapter contains an overview of the implementation schedule and an elaboration of the tasks to be accomplished in initiating the system.

#### GOALS OF A HUMAN SERVICES INFORMATION SYSTEM

The first task in the design of any information system is to precisely define the objectives the system is to accomplish. This was accomplished largely in the language of the resolution. In (H.2777) the South Carolina General Assembly directed the Legislative Audit Council to develop a plan of "statewide integrated information systems for human services," in consultation with the State Reorganization Commission. The resolution stated in general terms the goals of the resolution and the operational goals to be achieved by the information system. Additional refinement of these goals has been added based on commentary solicited from personnel representing South Carolina human services agencies, several oversight and support agencies, and agencies from the private sector. Further, some objectives are based on the analysis and review of a variety of types of information systems developed in other states and in the Federal Government.

As explained previously, since there are two types of users of a system's information, there are two types of information system goals - management oriented and client oriented. A statement of the desired goals must reflect the information needs of both of these perspectives.

The goals of the system follow.

- (1) To provide the highest possible quality of human services to the citizens of South Carolina.
- (2) To improve the delivery and management of human services by reducing administrative barriers which currently face a potential client. This includes eliminating unnecessary



duplication in the processes associated with a client's application for and receipt of services.

- (3) To reduce costs in the administering and delivery of human services while providing more services at a lower overall cost.
- (4) To ensure that effective safeguards are provided against potential fraud and other illegal and unethical practices in both the delivery of and receipt of human services and assistance.
- (5) The data which comes to a central location at the State level should make agency directors and program managers more accountable for achieving the stated goals of their respective programs.
- (6) The data collected centrally at the State level should increase the General Assembly's ability to set the priorities among human services programs in a rational and equitable manner.
- (7) The data maintained at the State level in a central location should improve the efficiency and comprehensiveness with which long-range planning in the States' human services programs is conducted.
- (8) The State level data should improve the capability for independent, objective evaluation of the human services programs. In particular, the collected data should aid in assessment of the impact in meeting the needs of the client population as well as in allowing evaluation of the efficiency and effectiveness of service delivery.
- (9) The information system must protect private and confidential data related to individuals from unauthorized, malicious, or commercially exploitative access or disclosure.

In the context of these nine operational goals at the State level, the system should improve the usefulness of the State's information to, for, and about clients involved in the human services programs.

The resolution also states that the General Assembly is aware that a centralized information system can aid in the achievement of these goals and can eliminate the fragmented system currently in existence. Therefore, this report is oriented toward incremental development of a centralized information system which can accomplish these goals.

Problems of the existing information system were discussed in Chapter II. For convenience in discussion throughout the remainder of the report, the recommended full scale system will be referred to as a Client Oriented State Management Information System for Human Services or COSMIS.

In carrying out the resolution the Legislative Audit Council conducted background research reviewing similar efforts in other states, in the Federal Government, and at the county and regional level within South Carolina and other states. Extensive interviews with agency personnel and representatives from the academic community were also conducted.

Based upon this research the Legislative Audit Council concludes that the goals of the resolution can be achieved in South Carolina with the implementation of a properly designed and managed statewide integrated information system for human services. However, the success of such an effort is contingent upon the existence of certain preconditions which are discussed below.

The Legislative Audit Council recognizes that the efforts to establish the preconditions for success and the effort that will then be necessary to implement the plan successfully, will require major changes in the existing procedures and some change in the structures currently involved in the delivery of human services. Implementation will require skilled agency management accompanied by strong support from the General Assembly.

#### TYPES OF USE

Data contained in an integrated information system for human services has basically two kinds of users. The language of the concurrent resolution (H.2777) addresses both of these categories of information needs. Both kinds of users have a variety of needs for different types and formats of data.

The first type of use is associated with getting needed services to the eligible client in an efficient, effective and expeditious manner. At this end of the information system a great deal of detailed data may be necessary. For example,

the programs or services and the eligibility criteria for each service must be available. Detailed data about each client such as current address, age, race, number of dependent family members, types of services already received, dates of service receipt, must also be available to ensure that each client receives the appropriate service in a timely manner. Usually, access to this data is needed on an immediate basis for case management purposes. The required frequency of access is at least as regular as the client's frequency of service receipt or application for service.

At the other end of a human services information system is the uppermost level of management - the policymakers who have very different types of information needs than the client and service delivery oriented component of an information system. The decision-making associated with policy development requires that the raw data associated with human services delivery be translated by competent staff into information which permits a rational and equitable allocation of the State's available resources. For example, legislators often ask questions about human services programs such as the following:

- (1) What is the number and the percentage of the eligible client population that are receiving services under the program?
- (2) What is the average cost per client? The modal cost? The median cost? The total annual cost of the program?
- (3) What would be the total cost of expanding the program to serve 100% of the eligible client population? 80%? 50%?
- (4) What guarantees exist to demonstrate that the services being delivered are genuinely needed?
- (5) What evaluation mechanisms and standards are in operation to demonstrate that the goals of the programs are being achieved in an efficient and effective manner? Are they accurate?

It is important to understand that all of these questions could not be answered from analysis of the type of data in the system which

is associated with the clients and the delivery of services. To accurately and usefully answer all of these questions would entail bringing in additional data from other sources and applying various types of quantitative techniques to generate appropriate responses. This simple example demonstrates that a client oriented information system which meets the information needs of management must contain an analysis and evaluation component. Even with such a component, the usefulness of the information system and its success will also depend upon the establishment of certain external preconditions.

PRECONDITIONS FOR SUCCESSFUL IMPLEMENTATION OF A CLIENT ORIENTED  
STATE MANAGEMENT INFORMATION SYSTEM FOR HUMAN SERVICES (COSMIS)

The preconditions necessary for a successful statewide system have been developed from observations of success and failure in other states, interviews with governmental practitioners, and interviews within the academic community.

The first condition for the successful implementation of a COSMIS has to do with the General Assembly itself. The Legislature must understand both the utilities of the system and its potential limitations. They must be well briefed and prepared to resist powerful and compelling arguments from human services agencies whose managers will, in general, be adamantly opposed to the concept of an integrated information system with an independent evaluation component. When an agency loses absolute control of its program-related data, its operational strengths and weaknesses become mercilessly exposed to outside scrutiny. Though still a complex task, it becomes easier for outsiders to analyze budget requests in the context of program performance criteria, unit costs, standards of efficiency and effectiveness in service delivery.

Without consensus, support and involvement on the part of the Legislature, any effort to develop a statewide integrated information system for human services will have little likelihood of success.

The second precondition for the success of COSMIS, if it is to serve legislative information needs effectively, is the existence

of a staff that has a thorough understanding of the information system and knows how to use it skillfully. They must possess sufficient technical expertise to translate analytical outputs from the COSMIS into a form that can be readily used by legislators and legislative committees. Only a person can perform the translation of data into useful information.

A third precondition has to do with the cooperation of groups external to the policy-making body. It is especially critical if the policy body is a Legislature.

Legislatures as a rule, neither generate the data they need for analysis in decision-making, nor (with few exceptions) do they possess a processing capability to store and manipulate data. They are dependent on external sources for supplying at least the raw data needed for management oriented analyses and reports.

This means that Legislatures must rely ultimately on the cooperation of agencies in both entering the necessary data into the system and in providing the support for a certain amount of the processing and analysis of the data. Coupled with the bureaucratic proclivity for inertia, it has been the consistent experience in other states that if agency managers are not enthusiastic about participation in an integrated information system, the quality of data entry and support for storage and processing of the data during the development and implementation stages declines significantly. Therefore, positively motivated agency participation becomes an important precondition for successful implementation of COSMIS.

A fourth precondition for success has to do with management or "ownership" of the system. Whether it be in the Executive Branch or in the Legislative Branch, the system must be run firmly by a well-defined body that possesses statutory management authority and is clearly designated as the ultimate arbiter in assigning the system's operational priorities. Further, the linkage between the system's management group and the policy-making body which oversees the management group also must be highly visible. If the system is to reside in the Executive Branch, its managers must be able to operate in a non-partisan environment with full support from the Legislature.

Similarly, if the management body is to be housed under the Legislative Branch, the unit must operate in a non-partisan manner and serve well the information needs for oversight, evaluation, and planning in the Executive Branch.

The fifth precondition for success is the requirement that the entire effort be mandated by legislation. The legislation must include at a minimum the following points.

- (1) The statute must mandate agency participation and hold agency directors liable for charges of misfeasance in cases of noncompliance.
- (2) The statute must delegate enforcement authority to the body responsible for management of the system.
- (3) The statute must designate a reasonable time table for development, testing, and step-by-step implementation of the system.
- (4) The statute must incorporate or direct the preparation of model legislation dealing with the right to privacy issue which a) provides a meaningful legal definition of privacy, b) prescribes rules for protecting individual privacy which are compatible with the Freedom of Information Act, c) specifies enforcement authority and establishes penalties for violations, d) addresses the State's liability and obligations under the rules for protecting privacy.
- (5) The statute must require the establishment of mechanisms which evaluate the functioning and performance of the information system itself with provisions for modification as needed to improve efficiency and effectiveness.

#### OVERVIEW OF THE PLAN FOR IMPLEMENTATION

The implementation plan consists of four phases. The first phase will lay the groundwork for each succeeding phase. This phase will entail establishing appropriate legislation which aids implementation of the system, cites objectives of the system, and forms a body which will coordinate the implementation and later manage the system. The second phase implemented after evaluation of the accomplishments of the first phase, will begin transfer of client, provider and program data files

from selected human services programs as the system management group determines to be necessary, into a central computer facility which will be totally dedicated to support of the human services information system.

The third phase will entail integrating the program data bases of the remaining human services agencies into the centralized data processing service center. Phase four will consist of ongoing evaluation, testing, modifications and implementing technical innovations as needed.

#### INITIATING THE SYSTEM - PHASE 1

The first task in initiating the information system is to pass enabling legislation which accomplishes the following. The legislation should state the overall objectives in developing the information system. It should also provide a detailed statement of the objectives to be achieved at each phase of implementation. The act should establish the body which is to implement the information system and will later become the management group responsible for operating the system.

The following discussion is structured in a manner intended to provide an outline of the salient points to be included in the enabling legislation.

- I. The Audit Council recommends the system management structure which is presented in Chapter IV. However, the system manager's position may be mandated to report to the Budget and Control Board, the Executive Branch, to a joint oversight committee, or directly to the General Assembly.

##### (A) SPECIFY ROLE OF SYSTEM MANAGEMENT GROUP

The enforcement authority, duties, powers, and the characteristics of the system management staff should be stated. There should be a technically qualified data processing manager who reports directly to the executive director or system manager. The system manager's role is to ensure that the information system is performing according to the directions and priorities

established by the General Assembly and is meeting the information needs and data processing needs of all users efficiently and effectively.

A more detailed discussion of the responsibilities and functions of the system management group appears in Chapter IV. However, it should be emphasized that this group should also be the implementing body. The management group should have the authority to determine after the system is initiated, whether or not increased centralization of human services related data processing will be necessary in order to achieve the goals of the resolution.

(B) STATUTORY ENFORCEMENT AUTHORITY

The implementing body must have statutory enforcement authority in order to ensure agency compliance and be able to issue policy directives relating to the operation of the system. The statute must mandate agency participation and hold agency directors liable for charges of misfeasance in cases of willful non-compliance.

(C) MODEL PRIVACY LEGISLATION

The statute should incorporate or direct the preparation of model legislation dealing with the privacy issue, as discussed previously.

(D) SPECIFY TIME TABLE

The statute must designate a reasonable time table for implementation which allows enough flexibility for testing and modification as needed.

(E) ESTABLISH EVALUATION OF THE SYSTEM

The legislation should further direct the Audit Council to carry out evaluation of the system and to make periodic recommendations for improvement as necessary. This should be



done through regular summary reports to the General Assembly on the performance of the system. The recommended functions of the evaluation and management components of the system are outlined in more detail in the following chapter.

- II. The enabling legislation should cite in detail three specific tasks to be accomplished by the implementing body during the first phase of system implementation.

(A) IDENTIFY RECURRING INFORMATION NEEDS

After a thorough review with the Legislature of the recurring needs for human services information useful in Legislative oversight, the implementing group should require systematic policies and procedures to be followed by State agencies in the collection of the data necessary to satisfy the Assembly's information needs.

(B) REQUIRE PROGRAM EVALUATION

Provisions should be included requiring program evaluation and aggregate analysis of client, program and provider data. It should be stated that the goal of these provisions is to aid in the detection of fraud and abuse, aid in measuring the effectiveness of programs, and to provide information to central State Government which is useful in oversight and planning in the area of human services. The raw data, however, is to be sent to a central location where it will be analyzed and then prepared for distribution to the General Assembly in the manner most appropriate for their needs. This function is outlined further in more detail in the following chapter.

(C) IMPLEMENT UNIQUE CLIENT IDENTIFIER NUMBER

The third major task is to implement a system for providing a unique identifying number for each human services' client to be used consistently across all human services programs and agencies with which a client interacts. Policies and procedures must be developed prior to implementing this procedure which

reflect privacy and operational considerations. The Division of Research and Statistics also should be heavily involved in the development of this methodology.

This will entail two phases. First, predesignated lists of numbers will be provided to each human services agency for assignment to new clients. Second, the implementing task force will coordinate records review teams from each human service agency which will begin conversion of existing client records to include an identification number unique to each client.

To be considered with the unique identifier is the use of a client identification card which has the client's number embossed on it. It may also contain codes for data elements which can be useful in detecting and preventing fraud and abuse. The codes can also be used to aid analysis of program performance, aid planning for the optimum location for service delivery facilities, and aid planning for optimum distribution of field-workers based on volume of community needs.

For example, a code indicating the place of the card's issuance could be included with a code showing the client's zone of residency. Statistical analysis using these two variables, plus the location of the delivery facility for each transaction, and the frequency of each type of transaction could identify problems in accessibility. It also could be used to plan better locations for delivery facilities, or indicate that a mobile service delivery capability should be added in a particular area, or it could be used to develop a route and schedule for a client transportation system.

III. The following should be accomplished in order to achieve the objectives of the first phase and to prepare for achieving the operational goals of the information system as stated previously.

(A) LEGISLATIVE ANALYSIS STAFF

The need for a technically qualified non-partisan professional staff large enough to provide adequate analytical

support in meeting the information needs of the General Assembly should be addressed.

(B) POSITIVE MOTIVATION AND TRAINING

Steps must be taken by the implementing body to provide positive motivation and support for participation in the information system by all agencies involved. This should involve extensive orientation and training for agency personnel, including agency managers.

(C) INFORMATION AND REFERRAL SYSTEM

The development of an information and referral system based upon a comprehensive inventory of existing programs and designed with the needs of all the people of South Carolina in mind should be considered.

(D) ELIMINATE UNNECESSARY DUPLICATION IN BOOKKEEPING

Expansion of the role of the Comptroller General to include the responsibility for maintenance of accounting ledgers of selected agencies on a schedule to be determined by the Comptroller General in consultation with the State Auditor.

PHASE 2 OF IMPLEMENTATION

The second phase of implementation will be preceded by an evaluation of the accomplishments of the first phase. This evaluation will ensure that the plan is being implemented efficiently and effectively and is achieving the goals of the resolution. If new direction or additional legislation is needed, it can be developed at this point.

The system management group will determine reassignment priorities and schedules for transferring human services computer work from the universities to the COSMIS data processing service center. This will be accompanied by the transfer of any equipment or data processing personnel from human services agencies that may be necessary or may improve cost effectiveness.

### PHASE 3 AND PHASE 4 OF IMPLEMENTATION

Based on continuing evaluation, the third phase of implementation will consist of continuing to integrate the client, provider and program data files belonging to additional human services agencies into the central data processing service center of COSMIS. The fourth phase will consist of a continuation of these activities. The following chapter presents a detailed discussion of each phase of the proposed implementation schedule.

## CHAPTER IV

### DETAILED IMPLEMENTATION SCHEDULE, COST ESTIMATES, AND DETAILED PLAN OF COSMIS

This chapter will first present an overview of the conversion schedule with a general discussion of how a portion of the cost could be absorbed from existing funds through transfers of existing resources. Following the discussion of cost absorption is the suggested implementation schedule and a detailed discussion of estimated costs.

The chapter concludes with a detailed presentation of the COSMIS.

### INTRODUCTION

The overall goal of COSMIS is to ensure efficient and effective use of the funds allocated to human services agencies. To accomplish this end there is an emphasis on development of a centralized computer-based information system.

The current degree of fragmentation and lack of coordination in the State's use of data processing resources has precluded decision-makers at the State-level from receiving needed information in a timely manner. As was stated in the introduction to the first report to the General Assembly under the Fiscal Accountability Act:

Millions of tax dollars are spent annually on the capture, transmission, processing and storage of voluminous quantities of data. In spite of the State's large investment in data processing resources, virtually none of this data is transformed systematically into concise summary information that is useful to the General Assembly for oversight, evaluation, public accountability and planning purposes.

This statement applies to human services agencies and also includes non-automated data collection activities.

As was described in Table 3, the current data processing costs for the 21 human services agencies is \$9.5 million. With the implementation of COSMIS, a large portion of this funding, equipment and personnel would be transferred to COSMIS. In addition to the existing automated program-related data files of the 21 human services agencies,

there is a large amount of data necessary to program operation which is currently not automated. The integration of this data into COSMIS will require additional expenditures over and above the current costs of manual filing. This expenditure will largely be a one-time outlay for the 1) transferral of manual records to automated programs and 2) modification of recording and reporting requirements to accommodate COSMIS. This cost will be offset to a certain extent by the following factors:

- (1) Less manual handling of reports and records.
- (2) Less equipment and storage space will be necessary.
- (3) Non-duplication of individual client records, provider records and program data on both interagency and intra-agency levels.

For clarification of this concept, COSMIS should be viewed both in its relationship to the agencies and in its role within the governmental system. For example, a hypothetical agency, Agency "X", currently may have contracts with a university to obtain data processing support. As COSMIS is implemented, Agency "X" would switch its fiscal and personnel data processing requirements to the Comptroller General and the consolidated personnel/payroll system respectively. This would result in some cost savings to the agency. Agency "X" would also place its program, client and provider data in COSMIS. This would result in 1) some cost savings to the agency; 2) space savings due to centralization of automated file systems; 3) potential savings through agency managers having aggregated State-level data regarding clients and case management - such as statistics on State trends in caseloads; 4) potential savings resulting from Legislative and Executive Branch decisions being based upon more complete and accurate data. Similarly, a hypothetical non-automated agency, Agency "Y", would switch its fiscal management data to the Comptroller General and to the consolidated personnel/payroll system. Its client, provider and program data would be integrated into COSMIS. Agency "Y" would realize the same cost savings as Agency "X" plus it no longer would be encumbered by a manual filing system.

Currently agencies receive two kinds of inputs: data input, which is usually at a constant rate; and demands for data which are often uncoordinated and sporadic. Often, the requests are for data

arrayed in a format which is not compatible with the format in which the data is routinely stored for operational purposes within the agency. There are no prescribed statewide standards for data management, other than specific requirements within certain programs, so that meaningful aggregate analysis of the performance of human services programs at the State-level is seldom possible.

The money currently spent on data processing in human services agencies could be channeled into development of a data processing service center which has the capability to store, cross/reference and analyze standardized data elements. Then, comprehensive reports could be generated for management while the data processing necessary to support the service delivery programs could be provided efficiently. The anticipated result would be 1) overall cost savings to agencies resulting from centralization and standardization of reporting procedures and reporting requirements; and 2) potential savings resulting from the comprehensive production of management information useful to agencies, the Legislature, and the Executive Branch. Figure 1 (p. 82) illustrates this optimum situation. Data inputs and demands for data enter Block 1, (Agencies and Programs). This entry is processed appropriately and then channeled to either Block 2 (Administration and Fiscal Data Processing) or Block 3 (Client, Provider and Program Data Processing). A variety of types of reports can then be generated to satisfy the information needs of different users. Recently, there has been some growth towards the development of the process symbolized by the location of Block 2. But there has been little effort to operationalize Block 3, which symbolizes the operation of COSMIS. Without input from both Block 2 and Block 3, State-level decision-making is bound to be handicapped.

#### SUGGESTED IMPLEMENTATION SCHEDULE FOR COSMIS

Following is a tentative schedule for the incorporation of COSMIS into the State's existing data processing procedures. Although each phase is assigned a time frame in which to be implemented, flexibility should be maintained. The phases themselves are sequential for obvious reasons, however, the tasks within each phase, especially Phase I, may and should be worked on concurrently.

Table 7 lists the nine agencies or the major programs administered by human services agencies which are currently on or are transferrable to an automated records-keeping system. Certain of these programs contain data files or possess requirements for data manipulation which would not be immediately transferable to COSMIS. They will require careful analysis of the cost benefits of conversion prior to implementing the integration of their data files into COSMIS. The remaining twelve agencies will in general require conversion from a manual records-keeping system to the automated COSMIS data files.

TABLE 7

HUMAN SERVICES AGENCIES WITH SOME DEGREE OF AUTOMATION OR  
POTENTIAL FOR AUTOMATION IN PROGRAMS OR ADMINISTRATION

- (1) Alcohol and Drug Abuse  
State Plan on Alcohol and Drug Abuse  
Management Information System (MIS)
- (2) Blind, Commission for the  
Client Rehabilitation  
Disabilities Determination
- (3) Corrections, Department of  
Management and Information Systems
- (4) Employment Security Commission  
Unemployment Compensation - Benefits  
Work Incentive Program (Deals with AFDC Recipients)
- (5) DOA - CETA  
CETA - Manpower Planning
- (6) DHEC  
Client Information System  
Medicaid  
Medicare
- (7) SCDMH  
Client Information System
- (8) DSS  
Title XX  
Medical Assistance - Medicaid, Medicare  
Food Stamps (USDA)  
AFDC (Aid to Families with Dependent Children)  
SSI (Supplemental Security Income)
- (9) Vocational Rehabilitation  
Disabilities Determination



PHASE I - INITIATION - 12 TO 24 MONTHS (FY 79-80)

- (1) The legislation which authorizes the conversion to COSMIS and funding for the conversion (see discussion in Chapter III), should be developed. This legislation should: (a) provide a clear and powerful mandate; (b) clearly identify the roles and responsibilities of all participants; (c) convey strong statutory authority to the system development and management group to ensure compliance.
- (2) A comprehensive inventory of the State's human services programs should begin which includes all data elements relative to (a) clients in those programs (including provider data); (b) program eligibility criteria; (c) funding source and amounts; (d) general descriptive data such as current client load, number and type of system staff, and geographical distribution of clients and providers. The unique identifier numbering system should be prepared and its implementation begun.
- (3) The Attorney General should be directed to conduct research into the legal implications of the termination of existing contractual agreements between (a) two State agencies, and (b) a State agency and a commercial vendor of data processing services.
- (4) The State Personnel Division in conjunction with each of the agencies involved should be directed to develop comprehensive plans for the reassignment of existing data processing positions from selected agencies to the staff of the central data processing service center which supports COSMIS. This effort will be subject to the requirements and directions of the system design and development group.
- (5) All personnel to be assigned to the COSMIS complex, in addition to support personnel in all agencies, should undergo an intensive orientation in regard to the goals and responsibilities of the system and its operations.
- (6) There should be a complete physical inventory of all data processing hardware in use at human services agencies. This should include all peripheral and auxiliary devices. It also should describe the technical capabilities and characteristics of each

and indicate its obsolescence date if appropriate. Upon completion of this inventory a plan should be developed that outlines (a) which equipment can be economically integrated into the COSMIS data processing service center; (b) Requests for Proposal (RFP's), for additional equipment as needed if not already available among the State's data processing resources; (c) timetable for transporting, reconfiguration, and installation of machinery in the COSMIS data processing service center.

- (7) Detailed planning should begin for the pilot transfer of the Title XX data base from Clemson University to the COSMIS data processing service center.

- (a) Completely detailed design of the COSMIS is to be completed and evaluated by the Legislative and Executive Branches, agency management, and field caseworkers in human services. After the review, modifications to the design will be completed as directed.

Coordination will be maintained with Federal agencies during this phase in order to ensure that the design incorporates the capability to generate reports which satisfy the bulk of Federal evaluation, planning and oversight requirements.

- (b) There should be continued refinement of the detailed conversion and implementation schedule.
- (c) The Attorney General should be directed to develop model legislation dealing with the privacy and public information issues involved in the COSMIS as discussed in Chapter II of this report. The end product of this model legislation would be a State privacy act which also incorporates conditions of liability for various degrees of violation of the procedures associated with the act.
- (d) The personnel assigned to develop and manage the COSMIS will maintain a dialogue with Federal officials and with authorities in other states in order to share their experiences in infor-

mation systems and to gain their support and suggestions in the development of Federal and State reporting techniques.

- (e) The State will conduct a concentrated effort to obtain Federal funding or other grants which may be available in order to finance COSMIS or portions of it.
- (8) The implementing body will submit the report of its evaluation of the achievements and problems of Phase I. It should contain detailed recommendations for the steps that need to be taken in Phase II.

#### PHASE II - CENTRALIZATION OF DATA - 24 TO 36 MONTHS

- (1) This phase will begin with the incremental transfer and implementation of the Title XX program's data under the authority of COSMIS. At a minimum, the following activities will take place.
  - (a) Transfer of all data bases and software, applicable equipment, and key personnel to the central data processing service center of COSMIS.
  - (b) Adaptation of Title XX software to the COSMIS data base and analysis file system.
  - (c) Testing of installed system modules.
  - (d) Evaluation of test results and procedures.
  - (e) Adjustments and modifications to the system based upon evaluation reports and analyses.
  - (f) Orientation and training of all personnel involved in the system.
- (2) When the Title XX conversion is near completion, the data bases and the data file manipulation capabilities associated with the remaining programs (such as Medicaid, Medicare and Public Assistance) which are currently under the direct authority of DSS, will be transferred and integrated into COSMIS.

#### PHASE III - FULL IMPLEMENTATION OF COSMIS - 36 TO 60 MONTHS

- (1) The integration of client, program and provider data files from the remaining human services agencies into COSMIS will take place. This integration will include the following general steps;

- (a) Reorganization and programming of remaining human services agencies' client, program and provider data into the COSMIS files as determined by the system management group under the direction of the General Assembly.
- (b) Testing of programs and procedures.
- (c) Evaluation of testing.
- (d) Adjustment of procedures based on evaluation.

#### PHASE IV - CONTINUED MODIFICATION - ONGOING

- (1) This phase will perpetuate periodic modifications and improvements to COSMIS under the direction of the system's management group in response to evaluation, legislative direction, and the information needs of the Executive Branch.
- (2) The information requirements associated with new programs, new procedures, and new concepts will be reviewed and integrated into COSMIS as may be deemed appropriate.

More detail of the projected timetable is presented in Figure 2 (p. 83) and Figure 3 (p. 84). Figure 2 first provides an overview of the total phase-in. Figure 3 projects a tentative five to six year implementation schedule by the month.

## ESTIMATED COST OF COSMIS

Based upon comparative data collected from other states, from South Carolina State agencies and from conversations with the staff of the Division of Computer Systems Management, the Legislative Audit Council estimates that the cost of COSMIS as presently designed would entail total expenditures of between \$5 million and \$9.5 million over a five-year period. The front-end or start-up cost over the first two years would be an estimated \$4.6 million with an additional cost of between \$1 million and \$4.9 million over the following three years. The Legislative Audit Council arrived at this estimate in the following manner:

TABLE 8

### FIRST-YEAR COST PROJECTION OF COSMIS

(1) Cost of Primary Support Computer	\$1.50 million
(2) Cost of Personnel*	.40 million
(3) Maintenance Costs	.25 million
(4) Operational Costs/Supplies	<u>.50 million</u>
Total	\$2.65 million

\*See Table 9 on the following page.

This estimated \$2.65 million total cost would be offset by the following factors:

- (1) The transfer of the Department of Social Services Title XX data processing support and funding to COSMIS. Current estimates obtained from DSS place Title XX data processing costs at \$347,510 per year, including salaries.
- (2) The upgrading of the existing computer capability at the Division of General Services, which would be the location of the central data processing service center of COSMIS. A portion of this computer would be dedicated exclusively to COSMIS until the time when other computer units would be transferred to COSMIS usage.
- (3) The transfer of a large portion of data processing budgeted funds and the transfer of selected personnel positions and

equipment from human services agencies to COSMIS. If only 50% of FY 76-77 funding for data processing in the 21 human services agencies were transferred to COSMIS, it would provide \$4.5 million per year.

- (4) Conversations with information systems management personnel in other states have indicated that there are numerous Federal funding sources which could aid in COSMIS funding. Most states, however, cautioned that some of these grants could result in stringent reporting requirements which could be potentially disruptive to the overall efficiency of the information system.

The Legislative Audit Council recognizes that funding sources are of a finite nature. However, it is clear that a substantial portion, if not all, of any budgetary commitment to COSMIS could be obtained through some transfer of existing equipment, personnel and data processing funding from human services agencies, or from Federal sources. This is based on the fact that the current data processing costs in human services total \$9.5 million annually. In addition, the trend in data processing has been for agencies to move toward independent data processing capabilities with accompanying fragmentation in oversight and rapidly increasing costs.

Nevertheless, if not properly managed, COSMIS could result in some additional funding requirements not included in any current appropriation. In conclusion, the system should yield long-range savings and increased cost effectiveness through the achievement of the goals outlined in the resolution.

#### OPERATIONAL DESCRIPTION OF THE CLIENT ORIENTED STATEWIDE MANAGEMENT INFORMATION SYSTEM FOR HUMAN SERVICES (COSMIS)

This chapter uses several diagrams to aid in explaining the structure and the functions of the system. The discussion reflects the description of an information system that appeared in Chapter III. There are three major components. The first is the client and service delivery oriented component. The second component is the central data processing service center. Third, is the management oriented component of the system. Figure 4 (p. 90) provides a simplified general overview of the entire system with emphasis on the three major components. In addition, Figure 4 and the accompanying diagrams demonstrate that an

information system is made up of a set of subsystems designed to interact with each other in specific ways.

Block 1, labeled "Client and Service Delivery Oriented Component," is on the viewer's left when looking at Figure 4. This block contains the set of subsystems and linkages which symbolize both the activities and the data flow paths associated primarily with the application for delivery and receipt of services.

Block 2 symbolizes the centrally located data processing service center which is totally dedicated to support of COSMIS. This center houses the central computer operation which holds all client data, stores data on providers, and lists current program eligibility criteria for all programs which will support the client information and referral activity.

The service center will also support the analysis, planning, and program evaluation needs of the State. The "Statistical Evaluation and Analysis" block, as symbolized, will supply to management pre-designated results of analyses on a routine basis. This unit would also have the analytical capabilities to respond to unique, one-time requests for a specific kind of quantitative analysis.

Block 2 is where the operational management of COSMIS is located. As will be discussed in greater detail below, this block refers to the technical aspects of managing the system as well as to the executive or policy related aspects of the system's management. There is a technically qualified data processing manager who reports directly to the executive director or a system manager. The system manager's role is to ensure that the information system is performing according to the directions and priorities established by the General Assembly and that the system is meeting the information needs and data processing needs of all users efficiently and effectively. The system manager's position may be mandated to be directly accountable to either the General Assembly or to the Executive Branch, or to both through a joint oversight committee or through the Budget and Control Board. However, the Audit Council recommends the specific management structure discussed later in this chapter.

Block 3 represents the policy-making or management oriented component of the information system. It is comprised of the General Assembly, the Executive Branch and the Federal Government.

## DETAILED EXPLANATION OF THE SYSTEM'S PROCEDURES

Figure 5 (p. 91) presents an overview of the procedures and flows of data in COSMIS. The diagrams following Figure 5 are exploded views which show in clearer detail how each component functions within the system. Note that in Figure 5 each block has an identifying letter and a title which is referred to consistently in the narrative.

Figure 6 (p. 92) is an exploded view of Block 1 containing a brief summary narrative of the basic steps which occur in the delivery of services and their relationship to COSMIS. Figure 7 (p. 93) which follows is a further explanation of (B), the Information and Referral component, which is shown in Block 1 of Figure 5.

In brief, the Information and Referral system functions as follows. There is a single, well advertised, toll-free telephone number. An individual citizen who needs information to help deal with a problem calls this number and talks to an I & R counselor. The counselor has available a listing of all human services activities in the State, including service organizations in the private sector. The listing is cross-indexed by problem topic. This listing will provide summary information regarding eligibility for a particular type of service. If greater detail is needed, the counselor will have access to the central program data file in COSMIS (Subunit I in Block 2 in Figure 5) containing the details of eligibility criteria. The counselor will be able to access this data through an interactive computer terminal which may be either a video display terminal or a typewriter terminal.

Perhaps the most useful innovation for the caller or potential client is the telephone "bridging" capability. The counselor's directory of services will also contain the name and number of a contact person in each service site. The counselor will be able to "bridge" the potential client's call to the appropriate contact person or site. The counselor will remain in the three-way conversation long enough to ensure that the caller will reach the proper authority. If the caller needs additional communications assistance, the I & R counselor can again be called.

Appendix 6 is a copy of the data elements contained in the program data file belonging to Michigan's Statewide information and referral



system (NETWORK). It is an excellent example from a comprehensive statewide system.

## EXPLANATION OF THE DATA PROCESSING SERVICE CENTER

Block 2, the centrally located data processing service center of COSMIS is further detailed in Figure 8 (p. 94). This is the data bank of COSMIS. In general it contains four subsystems. Three of these, (H) Client Data, (I) Program Data, and (J) Provider Data, are merely machine stored files of data. The blocks (K) and (L) are sets of analytical computer programs and sets of other data from sources outside of the human services delivery system. These programs will provide reports from aggregate level analysis which will aid decision makers at the State-level in establishing funding priorities and assessing the level of goal achievement in existing programs in human services. This type of comprehensive State-level analysis is not now available either to the Executive or to the Legislative Branches.

Much lip service has been given to the concept of evaluation in social services programs in the last decade. There are many obstacles to meaningful evaluation. It is costly. Evaluation requires skilled practitioners, adequate data collected over a period of time, resources to perform evaluation, an environment which accepts adverse critique positively, and managers who will use the results of evaluation to improve the quality, efficiency, and effectiveness of their programs.

Dr. Carol H. Weiss, a prominent scholar and well known author in the field of evaluation research, has published the following advice which should be considered carefully in the development of COSMIS.

Evaluation as an applied research is committed to the principle of utility. If it is not going to have any effect on decisions, it is an exercise in futility. Evaluation is probably not worth doing in four kinds of circumstances:

1. When there are not questions about the program. It goes on, and decisions about its future either do not come up or have already been made.
2. When the program has no clear orientation. Program staff improvise activities from day to day, based on little thought and less principle, and the program shifts and changes, wanders around and seeks direction. There is little here to call "a program."
3. When people who should know cannot agree on what the program is trying to achieve. If there are vast

discrepancies in perceived goals,  
evaluation has no ground to stand on.

4. When there is not enough money or no staff sufficiently qualified to conduct the evaluation. Evaluation is a demanding business, calling for time, money, imagination, tenacity, and skill (pp. 10-11, Weiss, Carol H., Evaluation Research: Methods of Assessing Program Effectiveness, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1972, 160 pp.)

### MANAGEMENT OF COSMIS

Subunit 3 of Figure 5, COSMIS Management, is elaborated in Figure 9 (p. 95). The position of Executive Manager or Director of COSMIS is located in Block M. The director should also serve on the small group which will have immediate responsibility for general oversight over the system. The oversight group represents the system to the Advisory Committee and hears the input from the Advisory Committee. The oversight group must provide reasonable responses to inquiries from the Advisory Committee but is not subject to their control.

It is critical for the success of the system that its management body have the strongest possible authority. The decision concerning where to locate the group is one which the Council believes is most appropriately to be made by the General Assembly. However, the system's management must be independent, objective, non-partisan and possess the highest possible professional qualifications.

The management group could be placed under 1) the Budget and Control Board, 2) the Executive Branch, 3) the General Assembly, or 4) a small joint commission with both the Executive and the Legislative Branches represented.

Of utmost importance to the success of COSMIS is that independent constant evaluation of the overall performance of the information system be conducted by the Legislative Audit Council. This unit is shown as Block N., Unit for Evaluation of COSMIS.

The Audit Council will make recommendations for improving the performance of COSMIS directly to the General Assembly. Without this type of regular review and evaluation the experience in other states suggests that COSMIS could quickly become merely another layer of yet costlier bureaucracy dedicated first to serving its own ends rather than meeting the needs of its various users.

The comments from Dr. Weiss, cited above, regarding the purposes of evaluation are certainly applicable here. In addition, there are other considerations involved in evaluating a State-level information system which deserve some elaboration.

In general, there are five dimensions to be considered in evaluating a State-level information system. All of these dimensions may not be necessarily present in all information systems.

1. Oversight Aid. Both the Executive and Legislative Branches of government are concerned with having adequate data to maintain oversight over the activities of State agencies and especially over the budgeting and expenditure of resources.
2. Public Accountability. The concept of public accountability has traditionally referred to fiscal accountability. That is, public agencies should be able to show a clear and up-to-date record of their use of the public dollar, to include showing who received how much and for what purpose.
3. Budgeting. Much of the time of governmental managers at all levels is spent in budget preparation. Therefore, an important function of a State-level information system is to provide data and reports useful in preparing budgets.
4. Audit Aid. A State-level information system can be a very useful aid in the conduct of a variety of types of audits, e.g., fiscal audits, management audits, and program reviews.
5. Aid to Program Performance Evaluation. Information systems are increasingly intended to provide data indicating the successes, failures, strengths, weaknesses and cost effectiveness of programs which are administered by State agencies. There is special emphasis on Federal programs which are established to run for a specific time period and the State may be faced with picking up the responsibility and the cost for continuing the program when the Federal support ends.

There are certain constraints on the applicability of an evaluation methodology for State-level information systems which stem from political and other considerations. Following is a list of definitions, assumptions, and constraints which, in general, define the operational parameters of this type of evaluation. It is not a complete list of all factors associated with evaluating a State-level information system.

A. Definitions.

1. Information System. A State-level information system is composed of people, procedures, data and machinery which can produce data and/or reports that are useful in governmental oversight and decision-making.
2. Efficiency. Efficiency has to do with minimizing duplication, timeliness of system output, minimizing costs, and minimizing the effort of production of the system's output. Although it is a useful concept, because it is "intuitive" and flexible, it is difficult to develop a quantifiable standard for efficiency which can be applied universally.
3. Effectiveness. An evaluation criteria which looks for whether or not the desired objectives are accomplished. It must always be used in the context of criteria which examine quality and efficiency.

B. Constraints in Evaluation of a State-Level Information System.

1. Authority to Evaluate. Some authoritative source must initiate the evaluation since it will incur costs. Further, since the results of the analysis may reveal serious deficiencies or wrong-doing on the part of administrators of the system, objective evaluators must be employed who are protected against political "retribution" or compromise.
2. Access. The evaluation will be limited in its utility if total access to the system's data and procedures is denied.

C. Assumptions Underlying the Evaluation Process.

1. Goal Definition. The evaluation method selected is applicable only within the stated goals of the State information system. It may indicate that the goal definitions as articulated are inadequate to allow meaningful evaluation. However, it would be inappropriate to attempt to use evaluation methods to indicate what the goals should be.
2. Fiscal Emphasis. State information systems tend to focus heavily on fiscal analysis. Evaluation usually reflects this emphasis. In the fiscal area evaluation further assumes the following.
  - a. The system should be able to produce a complete, accurate and easy to read record of all State Government expenditures within a designated area.
  - b. The system should allow any individual to see the record of all of the funds made available to an agency and allow convenient comparison of details of agency budgets with agency expenditures.
3. Responsibility. Evaluation assumes that there is some implementing entity that is more or less charged with making the system "work." In a State system, there may be several entities responsible for discrete components or subsystems which comprise the whole system. Evaluation assumes that operational responsibility can be pinpointed.

COSMIS AND POLICY-MAKERS

Block 4 of Figure 5 depicts the Management Oriented Component of COSMIS. It represents the ultimate administrative authorities in Government, the General Assembly, the Executive Branch, and the Federal Government. The role of these bodies and their importance in developing a useful statewide integrated information system for human services has been discussed previously and needs no further explanation.

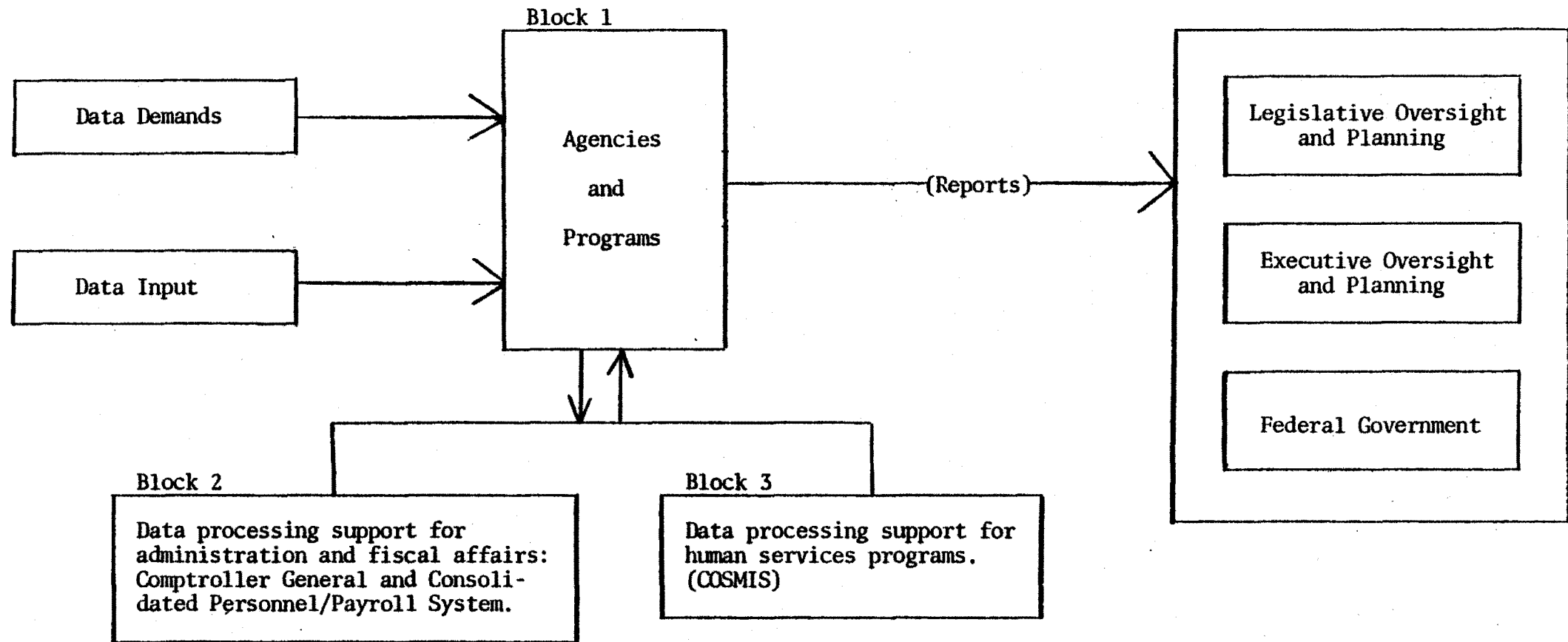


FIGURE 1. OPTIMUM MODEL OF DATA FLOW FOR STATE-LEVEL OVERSIGHT OF HUMAN SERVICES PROGRAMS.

FIGURE 2. OVERVIEW OF THE SCHEDULE FOR IMPLEMENTATION OF COSMIS.

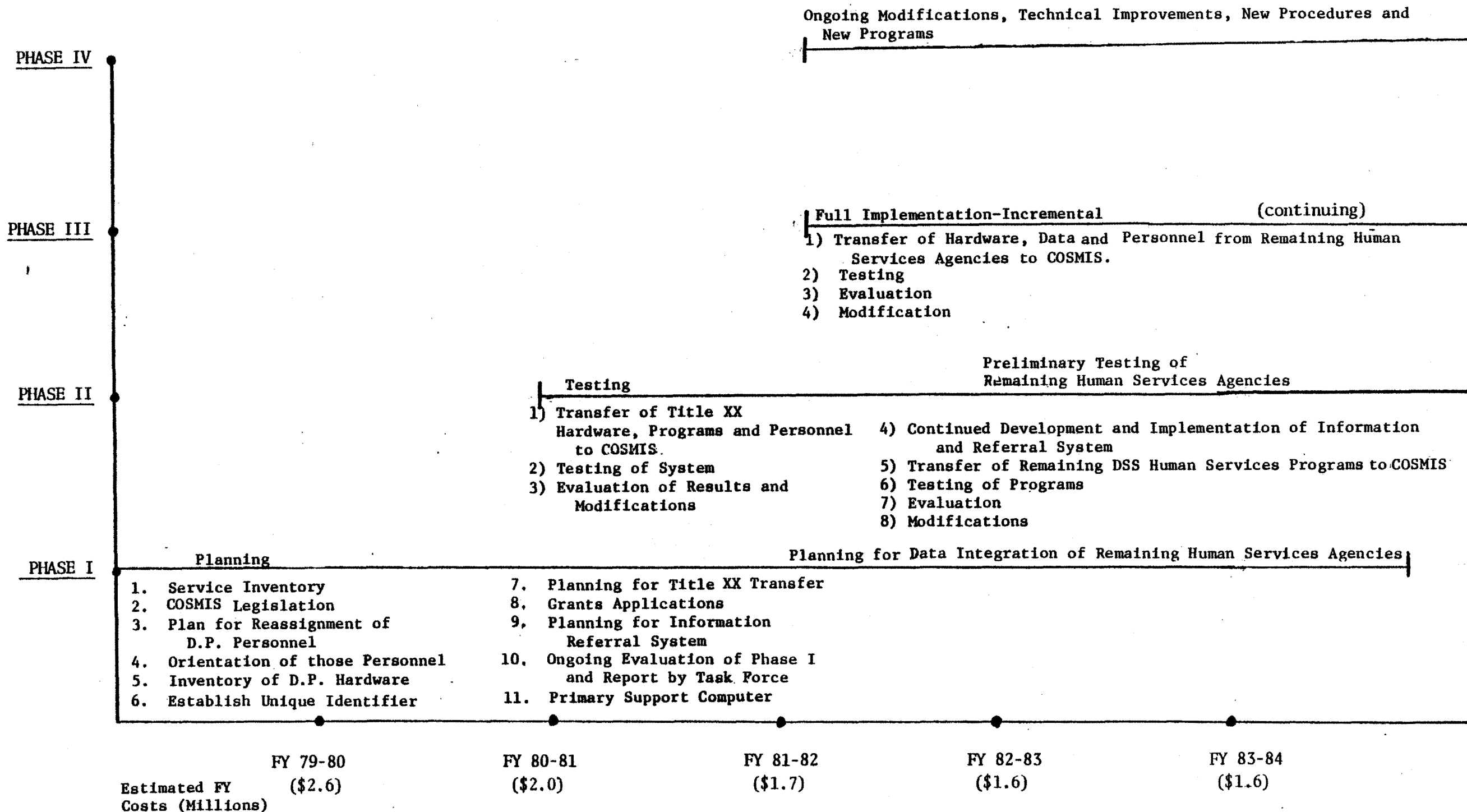




FIGURE 3. TIMETABLE FOR IMPLEMENTATION OF COSMIS.

	July	A	S	O	N	D	J	F	M	A	M	J	July	A	S	O	N	D	J	F
PHASE I - PLANNING																				
Inventory of Services - Establish Unique Identifier																				
COSMIS Legislation																				
Research by Attorney General: 1) Privacy Legislation; 2) Contract Modification																				
Planning for Information Referral System																				
Inventory of Data Processing Hardware																				
Planning for Reassignment of Personnel																				
Orientation of Personnel																				
Complete Detailed Design of COSMIS																				
Planning for Transfer of Title XX Data Bases																				
Coordination with Federal Agencies																				
Research and Application for Grants																				
Ongoing Evaluation of Phase I by Task Force Including Final Report																				
Phase II - TESTING																				

FIGURE 3 (CONTINUED)

FIGURE 3 (CONTINUED)	FY 1980												FY 1981						
	July	A	S	O	N	D	J	F	M	A	M	J	July	A	S	O	N	D	J
PHASE II - TESTING																			
(Phase I - Planning for remaining Human Services Agencies - Ongoing)																			
1) Incremental Transfer of Title XX to COSMIS																			
2) Transfer of Title XX Hardware, Programs and Personnel																			
3) Adapting Title XX Programs to COSMIS Data Base																			
4) Testing of Installed Modules																			
5) Evaluation of Testing																			
6) Adjustments or Modifications to Title XX System																			
7) Final Integration of Title XX Into COSMIS																			
8) Preliminary Testing of Other Human Services Agencies																			
PHASE III - FULL IMPLEMENTATION																			

FIGURE 3 (CONTINUED)

	FY-1981												FY 1982							
	July	A	S	O	N	D	J	F	M	A	M	J	July	A	S	O	N	D	J	F
PHASE III - FULL IMPLEMENTATION																				
(Phase II - Testing)																				
1) Transfer of All Other (Hardware, Data Personnel) DSS H.S. Programs to COSMIS																				
2) Adaptation of Programs to COSMIS Data Base																				
3) Testing of Programs																				
4) Evaluation																				
5) Modification																				
Phase IV - Ongoing Modifications and New Programs																				

FIGURE 3 (CONTINUED)

FIGURE 3 (CONTINUED)	1982				1983											1984			
	M	A	M	J	July	A	S	O	N	D	J	F	M	A	M	J	July	A	S
6) Final Integration of All DSS Program Data into COSMIS.																			
7) Transfer of Programs, Personnel and Hardware of other H.S. Agencies to COSMIS																			
8) Adaptation of Remaining Programs to COSMIS.																			
9) Testing																			
10) Evaluation																			
11) Modification																			

FIGURE 3 (CONTINUED)

[illegible]

TABLE 9

PHASE I AND II - PROJECTED PERSONNEL COSTS FOR COSMIS

(Salary estimates are based on current median State compensation rates.)

<u>Number</u>	<u>Job Description</u>	<u>Estimated Per Year Figures</u>
2	Professional Researchers - For Services Survey (1 year)	\$ 19,420
2	Clerk Typists - For Services Survey (1 year)	15,036
2	Full-Time Interns - For Services Survey (1 year)	10,400
5	Data Processing Coordinators/Programmers - COSMIS (Annual)	79,380
8	Technician/Equipment Operators - COSMIS (Annual)	56,600
2	Clerk Typists - COSMIS (Annual)	15,036
2	Technical/Management Advisors to Oversight Committee - COSMIS (Annual)	40,000
8	Programmers/Analysts Transferred from Title XX to COSMIS (Annual)	123,376
1	Executive Manager - COSMIS (Annual)	29,357
<u>1</u>	<u>Data Processing Manager - COSMIS (Annual)</u>	<u>18,046</u>
33	ESTIMATED TOTAL	\$406,651 Per Year

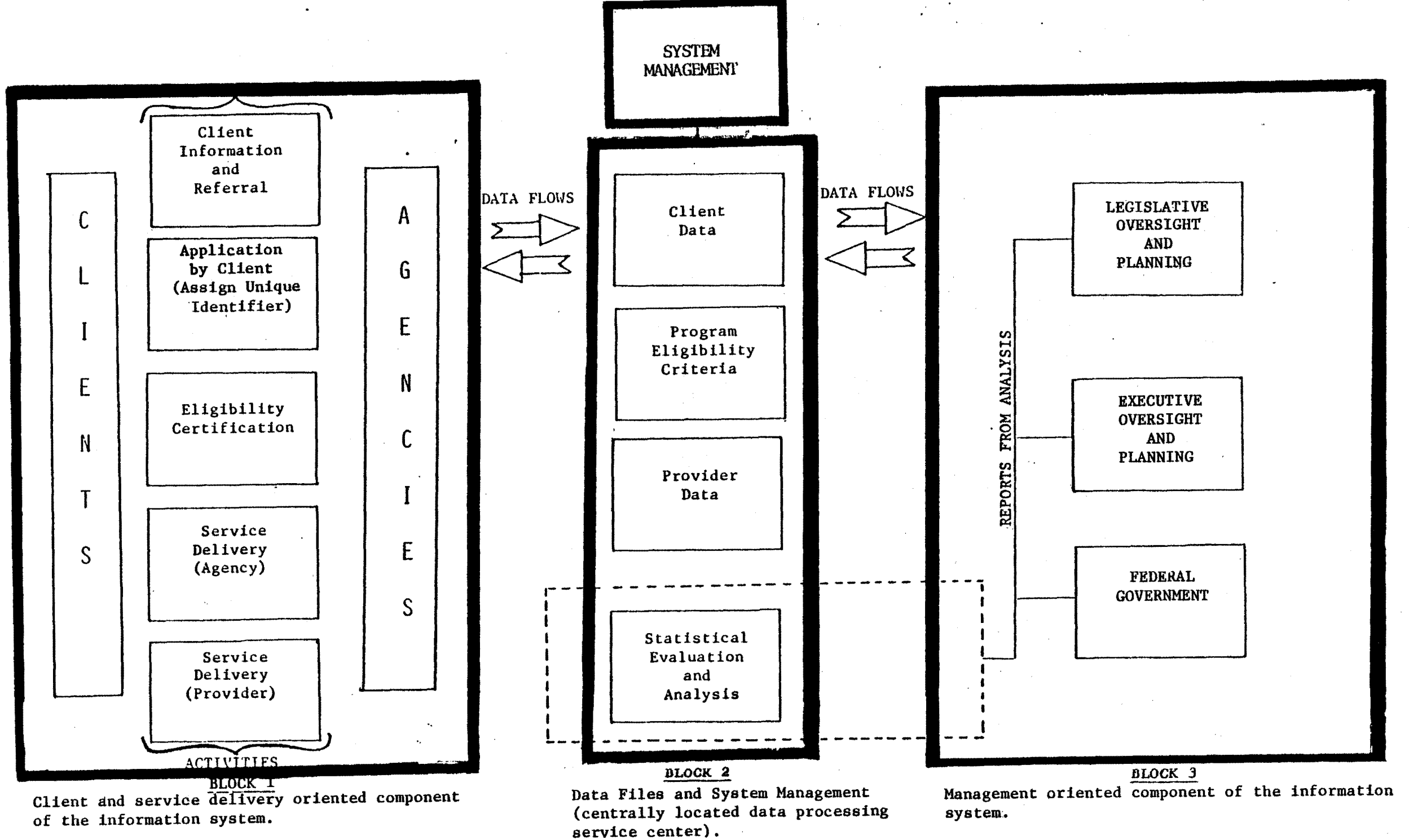


FIGURE 4. OVERVIEW OF CLIENT ORIENTED STATEWIDE MANAGEMENT INFORMATION SYSTEM FOR HUMAN SERVICES (COSMIS)

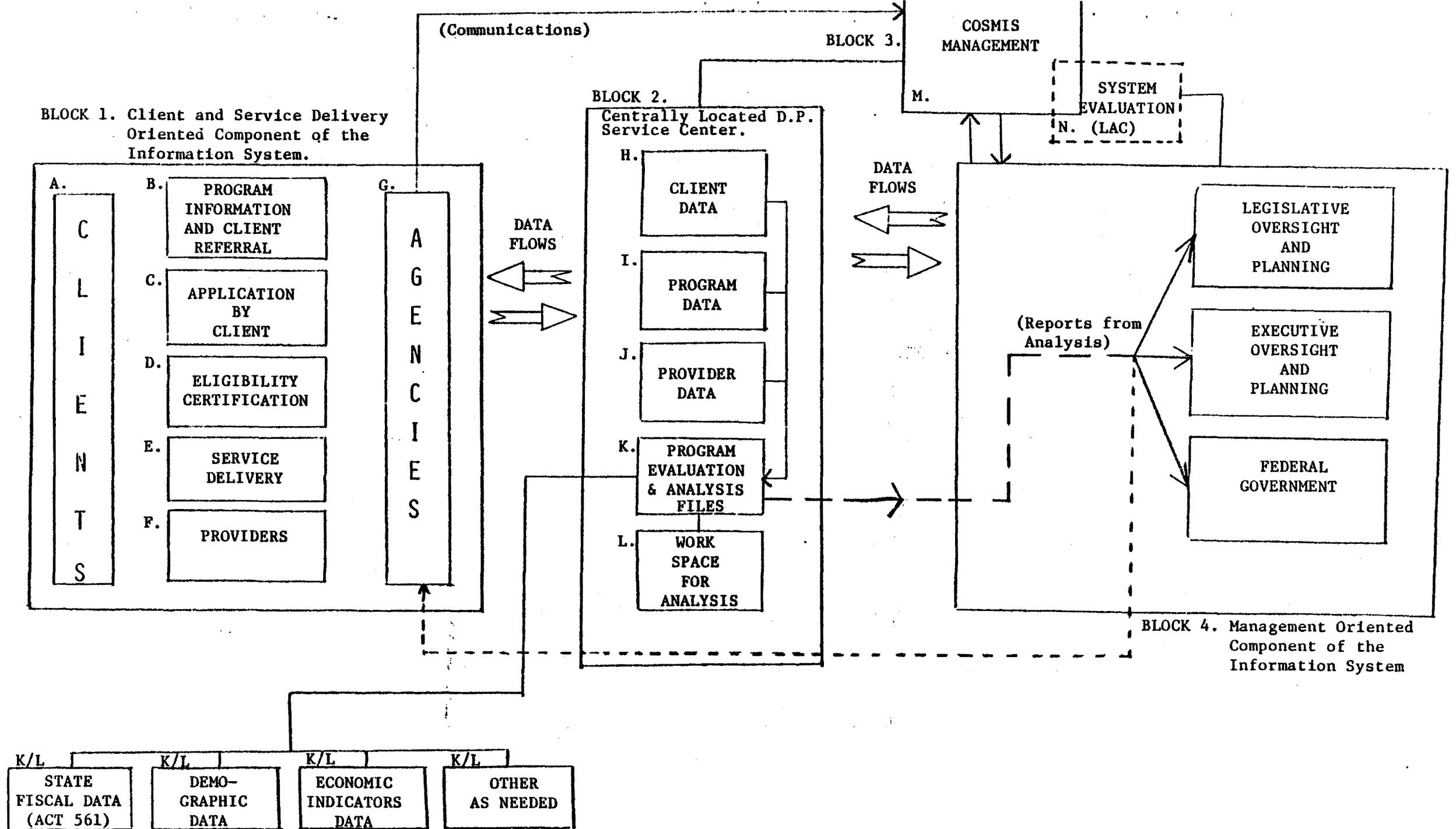
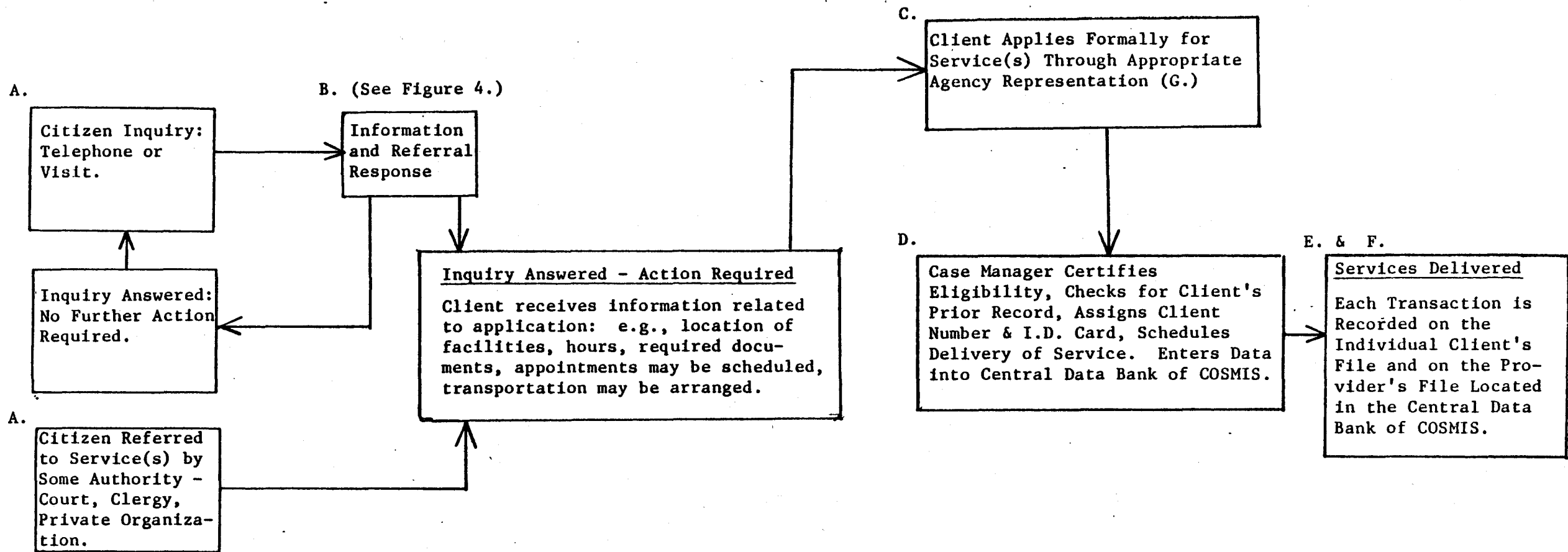


FIGURE 5. OVERVIEW OF PROCEDURES AND DATA FLOW IN COSMIS





Procedures at the Local Level Point of Client's Entry into the Service System.

FIGURE 6. EXPLODED VIEW OF BLOCK 1, CLIENT AND SERVICE DELIVERY ORIENTED COMPONENT OF COSMIS

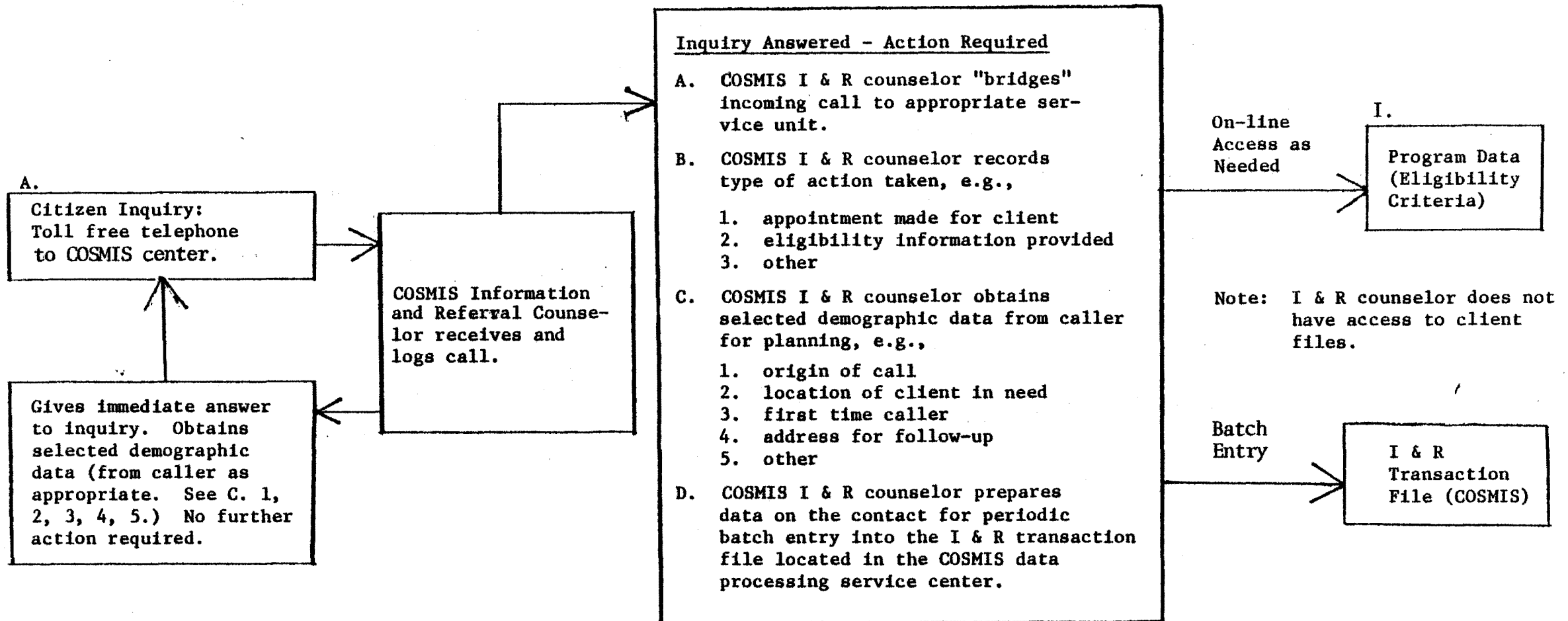


FIGURE 7. EXPLODED VIEW OF INFORMATION AND REFERRAL COMPONENT - (UNIT B IN BLOCK 1, FIGURE 5 AND FIGURE 6)

(To BLOCK 3. COSMIS Management)

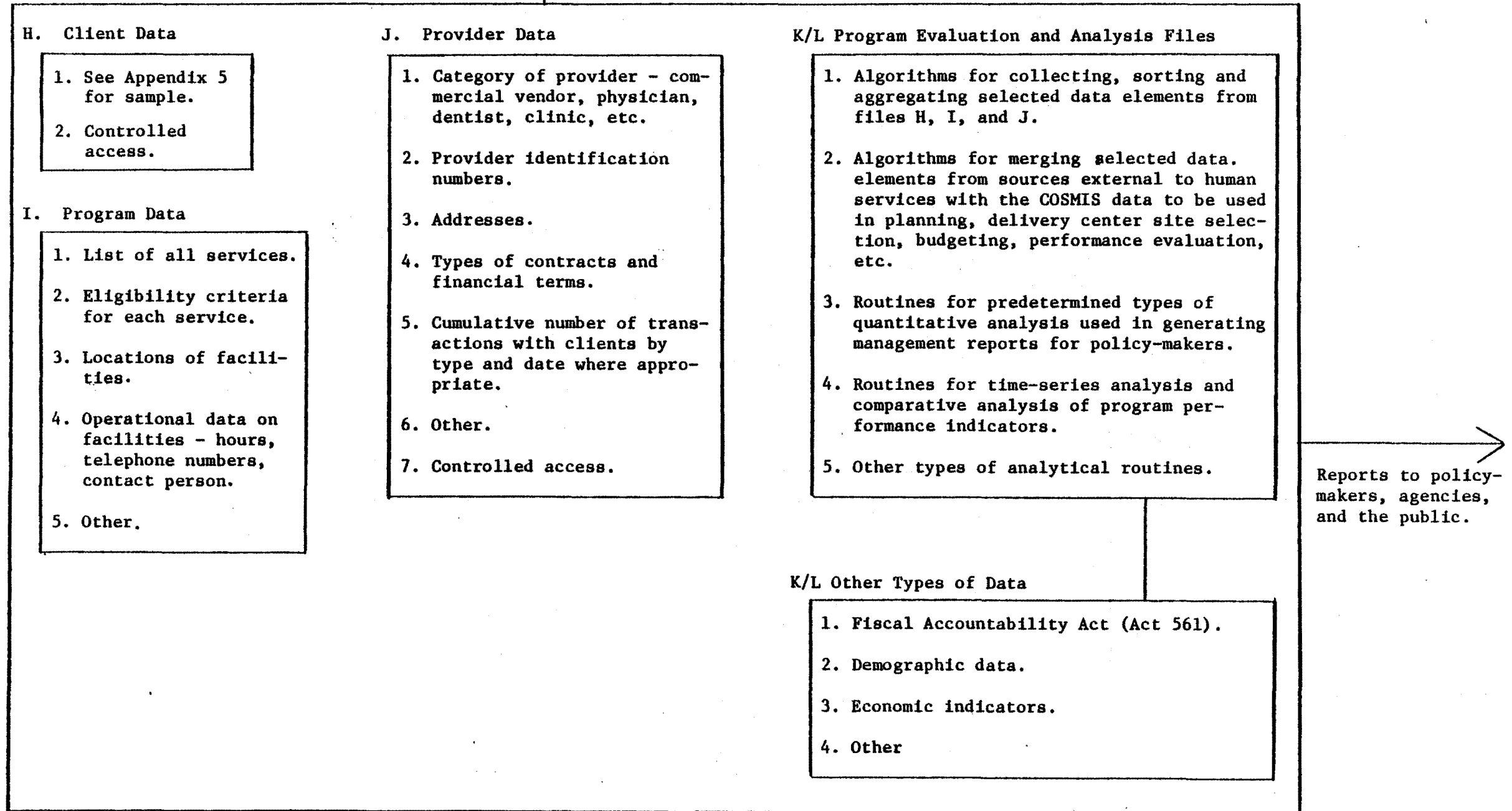


FIGURE 8. EXPLODED VIEW AND EXPLANATION OF BLOCK 2, DATA PROCESSING SERVICE CENTER OF COSMIS

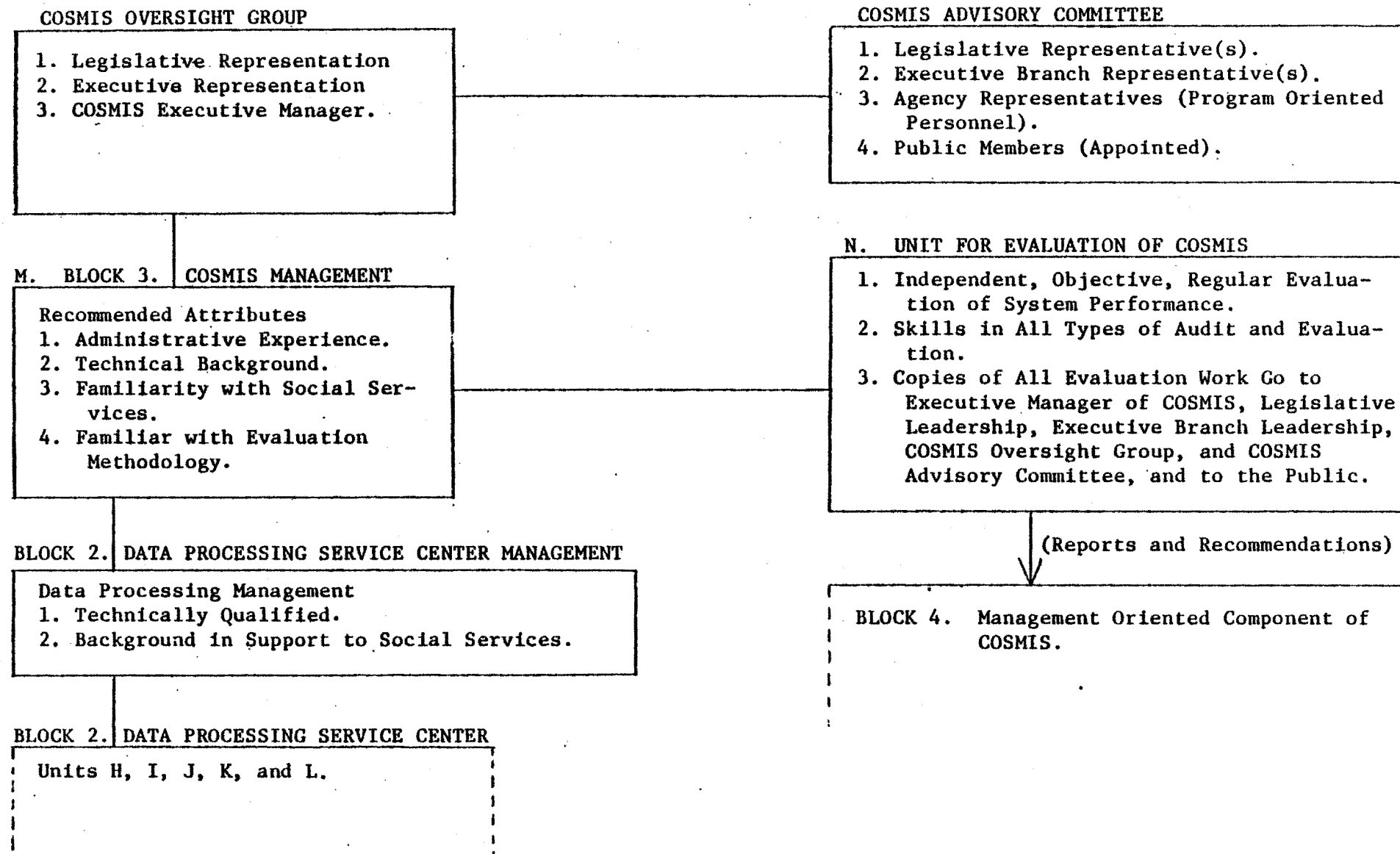


FIGURE 9. EXPLODED VIEW OF BLOCK 3 IN FIGURE 5, COSMIS' MANAGEMENT, OVERSIGHT, AND EVALUATION

## CHAPTER V

### CONCLUSION

This final chapter of the report summarizes the recommendations, reviews the major obstacles to implementing COSMIS and discusses their resolution.

#### SUMMARY OF RECOMMENDATIONS

The Legislative Audit Council believes that the plan for COSMIS as outlined is a reasonable goal for the State and, further, it is achievable utilizing the existing collective expertise of the State's technical personnel. It also is apparent that a portion of the initial cost can be absorbed through reassignment and reconfiguration of existing personnel and machine resources.

The design of COSMIS possesses considerable flexibility in that it can be phased in gradually depending on the needs and directives of the General Assembly. List 2 summarizes the recommendations associated with implementing the system.

#### LIST 2. SUMMARY OF COSMIS RELATED RECOMMENDATIONS

- (1) The recurring information needs of the General Assembly in the human services area should be clearly defined. Then the formation of systematic policies and procedures for agencies to follow uniformly in fulfilling these recurring needs should be mandated.
- (2) The ultimate authority over the system should reside in an Oversight and Planning Committee. This committee should have both Legislative and Executive Branch representation. The COSMIS' system manager should be a member. The committee should have access to any technical advice that may be necessary.
- (3) System Management is to be composed of a group of experienced professional persons with a highly qualified director directly responsible only to the executive Oversight and Planning Committee and ultimately to the General Assembly. The System Management component of COSMIS must have strong statutory authority to carry out the development and implementation of COSMIS.

- (4) In the development of COSMIS, the General Assembly should insist that the timetable as specified be closely followed. However, as implementation experience accrues, the system development group should have the flexibility to speed up or delay steps as they deem appropriate with the approval of legislative oversight.
- (5) The use of a unique identifier number for each client to be used across all human services programs and agencies should be implemented with adequate safeguards to protect clients from unauthorized access to personal data.
- (6) Steps must be taken to provide motivation and support for COSMIS on the part of all agencies involved.
- (7) System evaluation is to be an integral part of COSMIS in order to monitor the performance of COSMIS and to ensure that the system meets the needs of all authorized users efficiently and effectively. This task should be assigned to the Legislative Audit Council. This is in keeping with the Council's enabling legislation.
- (8) The need for a technically qualified non-partisan professional staff large enough to provide adequate analytical support in meeting the information needs of the General Assembly should be addressed.
- (9) The enabling legislation for COSMIS should consider the following service components for inclusion.
  - (A) An information and referral system based upon a comprehensive inventory of existing programs and designed with the needs of all of the people of South Carolina in mind. The design of the I & R component should take into consideration the experiences of other states in this area.
  - (B) Provisions should be included requiring program evaluation and aggregate analysis of client, program and provider data. The goal is to aid in the detection of fraud and abuse, aid in measuring the effectiveness of programs, and aid in providing reliable, useful and timely information to the General Assembly.

- (C) The role of the Comptroller General should be expanded to include the responsibility for maintenance of accounting ledgers of selected agencies on a schedule to be determined by the Comptroller General in consultation with State Auditor.
- (D) With assistance from the Division of Research and Statistics, agencies should develop procedures for and regularly conduct client impact analysis which include surveys of client satisfaction.
- (E) A consent form should be developed and used in conjunction with client satisfaction surveys.
- (F) Model privacy legislation should be developed by the Attorney General for review by the General Assembly which includes: (1) a formal definition of the terms "privacy" and "confidential;" (2) State liability and procedures involving, collecting, storing, releasing and destruction of confidential information; (3) enforcement authority and; (4) penalties for violation of the law.

#### REVIEW OF CITED OBSTACLES

The Legislative Audit Council has found a consensus among the State's data processing personnel, administrative, and management personnel that an information system such as COSMIS is feasible technologically. However, they are quick to add qualifying comments, cite obstacles and raise pertinent questions.

We will first review the three leading obstacles cited and then discuss their resolution.

##### (1) ORGANIZATIONAL AND MANAGEMENT STRUCTURE OF STATE GOVERNMENT

By far the most frequently cited problem is that the current organizational and management structure of State Government is not supportive of the concept of a COSMIS. Basically, the objections emphasize that the system of boards and commissions effectively insulates agencies from the kind of direct accountability necessary for successful implementation of a statewide integrated information system for human services. This problem was elaborated in detail in Chapter II, where the absence of a sufficiently strong central

office in the Executive Branch was also cited as contributing to this problem.

(2) ABSENCE OF A STATE POLICY FOR INFORMATION RESOURCE MANAGEMENT

Governments are becoming increasingly aware that information is a costly resource. More and more practitioners and academicians are suggesting that information be planned and budgeted for just as occurs with any other aspect of administration. The expense and the poor quality of information production in the human services area in South Carolina lends further support to this suggestion.

In recent hearings held before the subcommittee on Paperwork and Information Systems in State Government, example after example of delay, waste, and red tape resulting from the absence of uniform standards and policies in information management were cited. The Audit Council testified that "The absence of standardized data element definitions, the absence of uniform statewide procedures and policies for management of data and the absence of standardized requirements for data analysis have presented significant obstacles..." Also, "data collected within State agencies is so non-uniform that it makes meaningful comparative analysis either impossible or unnecessarily difficult."

In the absence of statewide standards for information many agencies have developed their own definitions and procedures for data management, data analysis and reporting. Seldom do these procedures generate data which is amenable to comparative analysis across agencies, and seldom is it valid for aggregate State-level analysis.

The lack of standardization in definitions, and procedures for information is a problem which must be overcome in order to successfully implement a statewide information system.

(3) TRENDS IN COMPUTER TECHNOLOGY

There is a major international trend toward miniaturization in computer technology and decentralization in its applications in management. The cost of minicomputers is dropping at a phenomenal rate while their processing capacity is increasing similarly. The surface logic for decentralization is persuasive. For example, if a large computer system containing a shared data base for ten



agencies is down for maintenance or has a breakdown, the daily operations of all its ten satellite agencies are interrupted and backed up. If the daily operations of each of these ten agencies were handled completely or in part by a minicomputer in each agency, down time for machine maintenance or a breakdown would affect only one agency at a time.

## RESOLUTION OF OBSTACLES TO COSMIS

The Audit Council feels that the obstacles to successful implementation of a statewide information system can be surmounted through proper planning and management. The following discussions emphasize a problem-solving approach to the objections that have been raised and when viewed collectively, provide a further rationale for implementing the system.

The first obstacle that has been cited is the current organizational structure of State Government. The management of COSMIS should be under the direct oversight of a strong central authority. During the design and implementation stages this will be especially important. The Legislature is the only source of the necessary authority to bring the agencies into compliance with changes that have such far-reaching implications. This influence can be exercised through the General Assembly's role in the oversight committee that provides the System Management for COSMIS, and in the legislation which mandates the system's development.

The second obstacle cited is the absence of a State policy for information resource management. Once information needs and goals are specified, then policies and procedures to meet these needs and goals can be mandated or implemented through Executive initiative. The specification of information goals should be done in such a way that it also provides policy guidance for improved coordination in the acquisition and use of data processing resources.

The State Reorganization Commission's Subcommittee on Paperwork and Information Systems has recently proposed draft legislation which cites the following goals:

Section 2. It is the purpose of the General Assembly in this act:

- (1) To achieve greater effectiveness and efficiency in the use of information resources throughout State Government.
- (2) To provide management assistance to help State agencies to achieve this greater degree of effectiveness and efficiency.
- (3) To promulgate policies, standards, and procedures for the use of information resources and technology in State Government.

Achievement of these goals complements the goals cited in Resolution H.2777 and will aid in overcoming the obstacles to successful implementation of the statewide human services information system. For this reason the Audit Council recommends that the General Assembly give favorable consideration to this type of legislation.

The third problem cited is the trend in computer technology toward miniaturization and decentralization in contrast to the centralized approach in COSMIS. The applications usually cited are in the private sector particularly in the banking field. However, there are certain limitations to the analogies that may be drawn between the private and public sectors. Activities in the public sector require a much higher degree of public disclosure and public accountability than is required in the private sector. This is so even though it may not always be cost-effective or efficient. Public accountability is a fundamental tenet for bureaucracy in a democratic society.

It must also be observed that even with decentralization of data processing in some large private enterprises, they continue to require rigid adherence to a well-defined hierarchical chain of managerial accountability. In the private sector, performance criteria are precisely defined, performance information is summarized and reported methodically to central management. Lower echelon managers are rewarded based on the evidence of their performance in meeting the goals established by the policy-makers.

It is however, possible to carry the accountability portion of the private sector's decentralization concept of information usage to South Carolina State Government. It is clear from the language of both H.2777 and the Fiscal Accountability Act that the General Assembly is dissatisfied with the current procedures for generating information for its membership. It has not been in receipt of adequate information "to fulfill their responsibilities as legislators in the appropriation of tax monies and in the general overview and monitoring of the activities of State Government" (Act 561).

There is obviously some point beyond which increased centralization is too cumbersome to improve efficiency and effectiveness. However, the current degree of decentralization in South Carolina has

led to fragmented accountability among agencies and instances of circumvention of legislative intent. The concurrent resolution is calling for a centralization of data resources at the State level not for a merger of agency operations. The goal is to eliminate costly and unnecessary duplication in operational records-keeping, provide better services for clients, and generate better information for policy-makers.

### CONCLUSION

This report has examined the inadequacies of the existing system for producing management information relating to the area of human services. It also has presented a plan for a statewide integrated information system for human services which is designed to improve the efficiency, effectiveness and quality of the delivery of human services. The improvement is to be achieved in part through providing comprehensive, accurate, and timely information relating to the performance of human services programs to the General Assembly.

The report also has elaborated the conditions and criteria necessary to the successful implementation of a statewide human services information system.

In order to achieve greater accountability for the quality and efficiency of human services delivery and in order to improve legislative oversight capabilities, the Audit Council recommends that the General Assembly consider implementing the plan presented in this report.

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## GLOSSARY

- Alphanumeric** [adjective] Alphabetic characters, numeric digits and special characters collectively. The term implies that the characters and digits are machine processable. The term is contracted from alphabetic-numeric to alphanumeric to its present form.
- Batch Processing** [noun] A procedure for processing in which data and programs are first collected into groups, or batches, and then processed sequentially. It is characterized by indeterminate turn around time.
- Computer Program** [noun] A set or related sets of sequentially coded instructions which direct a computer to perform specific operations. A computer program usually includes three functions: input (data entry), processing and output (reporting).
- Computer Terminal** [noun] A device which communicates with a computer.
- Core Memory** [noun] A medium of computer storage often located within the CPU. It usually consists of a series of doughnut shaped cores which are selectively charged magnetically or electrically. Also known as primary memory or main memory.
- CRT (Cathode Ray Tube)** [noun] A computer terminal which displays I/O on a television-like screen instead of typing or printing it on paper.
- CPU (Central Processing Unit)** [noun] A hardware component of a computer system which controls the interpretation and execution of instructions, the arithmetic functions, and the I/O channels.
- Data** [noun] Information that can be processed by a computer. This information may be composed of numeric digits, alphabetic characters and/or special characters.
- Database** [noun] A collection of related data stored in such a fashion that individual items are easily retrievable.
- Data Entry** [noun] The process of entering data into a computer system.
- Disc** [noun] A random-access memory medium used for external storage. It consists of a flat, circular rotating plate with a magnetic surface. Data is stored by selectively magnetizing portions of the flat surface.
- Display** [noun] Visual I/O image shown on a CRT or plasma screen.  
[verb] To show I/O on a CRT or plasma screen.
- External Storage Device** [noun] An on line device which reads from and writes on a machine readable data medium, such as magnetic discs, which are physically removable from the computer. Also known as auxiliary storage, bulk storage or secondary storage.
- Hard Copy** [noun] Computer output that is permanently produced on a physical medium, such as paper, which can be easily disassociated from the computer system.  
[adjective] Pertaining to computer output that is permanently produced on a physical medium, such as paper, which can be easily disassociated from the computer system.
- Hardware** [noun] The physical components of a computer system.
- I/O (Input/Output)** [noun] Computer input and output collectively.  
[adjective] Pertaining to computer input and output collectively.
- Input** [noun] Data used by a computer program.  
[verb] To convey data to a computer from either a terminal or an external storage device.  
[adjective] Pertaining to data entry.

**Interactive [adjective]** Characterized by a data input procedure in which the computer prompts the user for additional input as necessary. Data entry is commonly interspersed with processing. By its nature, the term cannot apply to batch processing system. It can apply only to real time or on line systems.

**Job [noun]** A set of one or more logically related tasks (subjobs) to be performed by a computer.

**Keyboard [noun]** A device for either entering data into a computer or converting data to a machine readable medium such as tape or disc. In appearance and method of operation, it commonly resembles a typewriter keyboard. It is often a component of a computer terminal.

**Key In [verb]** To manually operate a keyboard so as to either enter data into a computer or convert data to a machine readable medium such as tape or disc.

**Machine Readable [adjective]** Pertaining to either a data medium or the data contained by such a medium that can be input or read by a computer without manual intervention. Examples of such media are cards, tapes, and discs.

**OCR (Optical-Character Recognition) [noun]** Optical recognition by an input device of specific type fonts, varying size lines and/or in some cases, handwritten characters.

**On Line [adjective]** pertaining to direct communication with a computer.

**Output [noun]** Results or reports from a computer program  
[verb] To produce results or reports from a computer program  
[adjective] Pertaining to results or reports from a computer program.

**Plasma Screen [noun]** A computer terminal which displays I/O on a plasma screen instead of typing or printing it on paper.

**Print [verb]** To produce output via an impact mechanism such as a line printer which prints more than one character per impact.

**Processing [noun]** Work performed by the CPU.

**Program [noun]** See "Computer Program".

**Prompt [noun]** In an interactive system, the output which indicates that the system is waiting to receive data. In some cases, the prompt is text which indicates the data for which the system is waiting.  
[verb] To indicate that a system is waiting to receive data.

**Random Access [noun]** The ability to retrieve information from external memory without serially searching individual datum.

**Read [verb]** To convey information from either an input terminal or an external storage device into core memory.

**Read Time Processing [noun]** Processing which controls an environment by receiving data, processing it and returning results quickly enough to affect the environment. It often connotes an absence of human intervention as in a process control system.

**Remote [adjective]** Located at a distance from the central computer.

**Soft Copy [noun]** Visual display of computer output such as that produced by a CRT or plasma screen.  
[adjective] Pertaining to the display of computer output on a CRT or plasma screen.

**Software [noun]** The features of a computer system that are not hardware, especially the computer program or set of computer programs which control the computer hardware.

**Teletypewriter [noun]** A remote computer terminal which consists of both a typewriter-like keyboard for data entry and a print mechanism for data output.

Type [verb] To print computer output via an impact mechanism which prints one character per impact.

User [noun] A person who uses a computer system.

Vendor [noun] A person or firm which purveys computer services.

Write [verb] To convey information from core memory to either an output terminal or external storage.

(Source: A Congressional Guide to Computers, John D. Croley, Congressional Research Foundation, 1977, 42 pp.)



## APPENDICES

H. 2777

Introduced by Representatives Stevenson, Harris, Campbell, Middleton, Carter, McAbee, B. I. Hendricks, Jr., Helmly, Evatt, Bradley, Ralph K. Anderson, Jr., W. Sterling Anderson, James M. Arthur, Warren D. Arthur, IV, Ashe, Barksdale, Barrineau, Bennett, Blanding, Brandt, Bryant, Buchan, Burnside, Burriss, Busbee, Carnell, Chamblee, Clyburn, Cobb, Collins, Cooper, Crow, Dangerfield, Daniel, DesChamps, Dreyfus, Duncan, Eargle, Edwards, Felder, Floyd, Freeman, Gardner, Gasque, Gelegotis, Goggins, Granger, Graves, Gullledge, Ham, Harvey, Harvin, Hawkins, Hearn, Lloyd I. Hendricks, Hinson, Hodges, Holt, Hornsby, Howard, Huff, Hughston, Keller, Keyserling, Kinard, Kohn, Koon, Mangum, Manning, McInnis, Peden B. McLeod, William J. McLeod, Meyers, Mitchell, Nunnery, Patterson, Pracht, Rampey, Reel, Rudnick, Russell, Sandifer, Schwartz, Scott, Sheheen, Simpson, Smith, Snow, Stoddard, Taylor, Theodore, Tillman, Tison, Toal, Venters, Washington, Wilson, John T. Wood, Robert R. Woods, Bruce, Dukes, Holland, Lister, Marchant, Matthews, Moore, Murray, Rucker, Jolly, Johnson, McFadden, Klapman.

# A CONCURRIENT RESOLUTION

TO DIRECT THE LEGISLATIVE AUDIT COUNCIL IN CONSULTATION WITH THE STATE REORGANIZATION COMMISSION TO DEVELOP A PLAN OF STATEWIDE INTEGRATED INFORMATION SYSTEMS FOR HUMAN SERVICES.

WHEREAS, the General Assembly is concerned with providing the highest possible quality of human services to the citizens of South Carolina; and

WHEREAS, the General Assembly is aware that the delivery and management of human services could be improved by increasing program participation through the removal of barriers imposed by repetitive demands for the same information from different agencies and by saving state and federal expenditures through elimination of duplication in the eligibility certification processes for various human service programs; and

WHEREAS, the General Assembly is aware of the necessity for more comprehensive accountability from the agencies administering human services; and

WHEREAS, the General Assembly is aware of the necessity for providing effective safeguards against potential fraud and other illegal and unethical practices in both the delivery of and receipt of human services and assistance; and

WHEREAS, the General Assembly is cognizant of the fact that reductions in the cost of administering and delivering human services are desirable as a step towards providing more services at a lower overall cost; and

WHEREAS, the General Assembly is cognizant of the fact that a centralized information system could result in increased efficiency, effectiveness and economy as compared to the fragmented system currently in existence; and

WHEREAS, the Legislative Audit Council is responsible by law for examining governmental programs and agencies in order to determine their effectiveness, efficiency, economy and compliance with law and for making recommendations based on that examination.

NOW, THEREFORE,

BE IT RESOLVED by the House of Representatives, the Senate concurring:

THAT the General Assembly does hereby direct the Legislative Audit Council in consultation with the State Reorganization Commission and with the cooperation of all state agencies, departments and institutions to develop a plan for a statewide integrated information system for human services in South Carolina.

The Legislative Audit Council shall include in its examination:

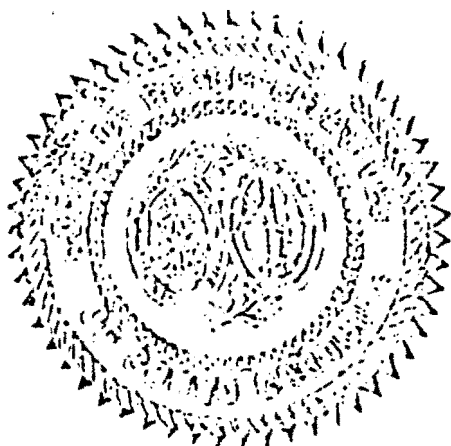
- (1) The information utilized by other states;
- (2) The potential for fraud and other illegal or unethical practices under the current system.
- (3) The potential for reducing the cost of administering services through the use of a centralized information system;
- (4) The level of accountability and client satisfaction under the present system;
- (5) The cost of implementing a system which would provide safeguards and improvements in the areas mentioned above and allow for the free and efficient transfer of information among human services agencies concerning client eligibility and background; and
- (6) The legal implications of such a centralized information system and the potential for abuse of recipients' privacy as otherwise guaranteed by law.

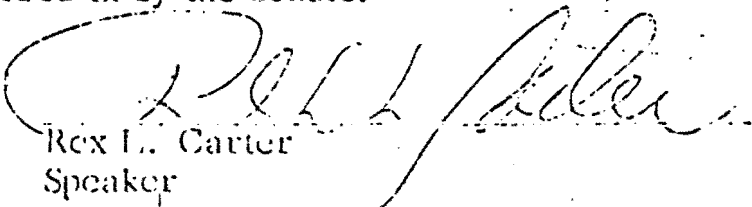
The Legislative Audit Council shall report its findings, recommendations and cost estimates on or before December 1, 1977, to the General Assembly.

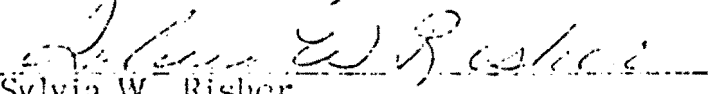
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State of South Carolina  
In the House of Representatives  
Columbia, South Carolina  
May 5, 1977

We hereby certify that the foregoing is a true and correct copy of a Resolution passed in the House of Representatives and concurred in by the Senate.



  
Rex L. Carter  
Speaker

  
Sylvia W. Risher  
Clerk of the House

## APPENDIX 2

### CONSIDERATIONS FOR PRIVACY LEGISLATION

In 1972, the Secretary's Advisory Committee on Automated Personal Data Systems was appointed by the Secretary of Health, Education and Welfare. The committee recommended a Code of Fair Information Practices Based Upon Five Principles. These five principles (later expanded by Congress to eight) and the findings of the DHEW Committee, published in July 1973, are generally credited with supplying the intellectual framework for the Privacy Act of 1974. The following is a discussion of the principle of Individual Participation as interpreted by the Privacy Protection Study Commission.

#### THE INDIVIDUAL PARTICIPATION PRINCIPLE

The third Privacy Act principle holds that an individual should have the right to challenge the contents of a record on the grounds that it is not accurate, timely, complete, or relevant. The principle specifically recognizes that information can be a source of unfairness to an individual. In theory, the right to participate in the maintenance of a record allows for complaint, involvement, and representation in order to force a balancing of the individual's interests against the record keeper's. If this principle is enforced, the individual is able to keep some measure of control (although not absolute control) over the substance of what he himself reveals to an agency, as well as to check on what the agency collects about him from other sources.

The Act has made significant progress toward fulfillment of this principle through its requirement that agencies establish procedures whereby the individual may request correction or amendment of a record, appeal any denial of his request, and file a statement of disagreement if the denial and appeal result in a stand-off, either before or after judicial review. In allowing the individual to file a statement of disagreement, even after the agency's denial of his request is upheld by a court, the Act implicitly recognizes that the agency and the individual may have divergent interests in the content of a record, as well as the fact that there may be no clear-cut criteria for assessing accuracy, timeliness, completeness, or relevance.

Despite the Act's sophistication in this area, however, the correction and amendment rights have not been widely exercised. This doubtless reflects the small number of access requests under the Privacy Act; but it may also be due in part to the fact that so many of the agency records an individual might want to correct or amend are exempt from the individual access requirement and therefore not open for correction or amendment. Nevertheless, the right to correct or amend a record, once access has been obtained, is an area in which the Privacy Act represents a significant advance for the individual.

---

(Source: Privacy Protection Study Committee.)

APPENDIX 3

CONSENT FORM FOR COMMUNITY MENTAL HEALTH CENTER  
FOLLOW-UP STUDY INTERVIEW

To the Client:

In order to learn more about the effectiveness of Denver's Community Mental Health Center services, we would like to ask you some questions about how you are doing.

If you give your permission, we would like to ask some questions about:

1. How you are feeling.
2. Whether and how much the services helped you.
3. How you are getting along with family and friends.
4. How work is going.
5. Whether you are having any trouble with alcohol or drugs.
6. Whether you have had any recent trouble with the law.

You should also know that:

- a) Participation in this interview is completely voluntary;
  - b) You do not have to answer any of the questions in the interview;
  - c) You can stop the interview if you wish;
  - d) The information you give will be used only for evaluation of the services you received;
  - c) The information will remain confidential and will not become part of your Mental Health Center medical record and will not be released to anyone for any other purposes.
- 

I have read or listened to the above information regarding the interview, and I am willing to proceed with the interview.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

---

(AFTER THE INTERVIEW)

I give my permission for a follow-up interviewer to contact (relative, friend or social agency employee--circle one),

---

NAME	ADDRESS	PHONE
------	---------	-------

to ask that person the same questions about me.

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Source: Northwest Denver Mental Health Center and University of Denver, Mental Health System Evaluation Project, "Denver Community Mental Health Questionnaire" (October 1975).

APPENDIX 4

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The State of South Carolina



Office of the Attorney General

GEORGE C. BEIGHLEY  
ASSISTANT ATTORNEY GENERAL

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POST OFFICE BOX 11549  
COLUMBIA, S. C. 29211  
TELEPHONE 803-758-3970

DANIEL R. MCLEOD  
ATTORNEY GENERAL

July 11, 1977

Mr. Larry Hamilton  
Legislative Audit Council  
500 Bankers Trust Tower  
Columbia, SC 29201

Dear Mr. Hamilton:

Several weeks ago I advised you that this Office was researching your request for information concerning computerized welfare records.

I have had a law clerk make a preliminary examination of the question you presented, and the enclosed memorandum is the initial result of his research. Would you please examine this memorandum and then advise me of a convenient time that we may get together to discuss the question.

I feel that a general discussion would be helpful at this point to determine the direction of any additional research and to determine the form our final opinion should take.

Sincerely,

A handwritten signature in dark ink, appearing to read "GCB/11/77".

George C. Beighley  
Assistant Attorney General

GCB/sjd  
enclosure

APPENDIX 4 (Continued)

M E M O R A N D U M

TO: Mr. Beighley  
FROM: Conrad Derrick  
DATE: July 7, 1977  
RE: Legislative Audit Council's Request for Information on  
the Potential Conflicts between the Right of Privacy and  
the Public's Right to Know with Reference to the Proposed  
Central Computer File of Welfare Recipients' Records

QUESTION PRESENTED: What are the ramifications of the use of a central computer file of the records of the state's welfare recipients on their individual right of privacy, particularly with regard to the effect of the Freedom of Information Act and the disclosure of public records?

DISCUSSION:

The questions presented by the development of a central computer file of the records of state welfare recipients and its impact on individual privacy are numerous and can only be answered in light of concrete cases and controversies which present specific situations of disclosure of such recorded information for particular purposes, and not through a general inquiry. Furthermore, as the Report of the Secretary of Health, Education and Welfare's Advisory Committee on Automated Personal Data Systems has noted, "There is little evidence, . . . , that court decisions will, either by invoking Constitutional rights or defining common law principles, evolve general rules, framed in terms of a legal concept of personal privacy, that will protect individuals against the potential adverse effects of personal-data record-keeping practices." R.N. Freed, Computers & Law: A Reference Work, 4th ed., 34. Therefore, this opinion will be limited to a consideration of the overall notion of confidentiality of records of recipients of public welfare and these individuals' rights

APPENDIX 4 (Continued)

MEMORANDUM  
July 7, 1977  
PAGE TWO

to regulate disclosure of this information.

The annotation at 54 A.L.R. 3d 768, "Confidentiality of Records as to Recipients of Public Welfare" comments at the outset that administering welfare funds necessarily involves the collecting of personal information. It further notes that limiting of access to such information to protect the recipients' personal privacy is generally governed by statutory regulations adopted by each state for the collection and dispersal of these data. In South Carolina, 1976 Code of Laws §§ 43-1-150, 43-1-160, and 30-3-10 et seq. provide these rules. Section 43-1-150 prescribes the state Department of Social Services as the custodian of the records, papers, files and communications of the state and county Departments of Social Services and requires it to make and enforce "reasonable" rules governing the use and preservation of these files. Section 43-1-160 makes the names of recipients and the amount of welfare monies which they receive "public records" and therefore open to "public inspection" according to the state Freedom of Information Act (i.e. §30-3-10 et seq.), and it also makes criminal the use of lists of recipients for commercial or political purposes. It is the "reasonable" rules for use and preservation of the files which are made by the state Department that are subject to challenge as not effectively protecting the right of privacy. To determine the reasonableness of disclosure of such information, several questions should be answered: (1) To whom are the records to be given? (2) For what purpose will the person or group be using the files? (3) Under what circumstances is the state De-



APPENDIX 4 (Continued)

MEMORANDUM  
July 7, 1977  
PAGE THREE

partment being asked to release the records? The A.L.R. annotation presented several cases in which access to welfare files was or wasn't granted, and it is appropriate to consider these fact situations in light of the above questions.

In Bell v. Bankers Life & Casualty Co. (1945), 327 Ill. App. 321, 64 N.E.2d 204, a statute which strictly forbade voluntary disclosure was held not to apply to involuntary disclosure by subpoena. In that case, the insurance company was seeking the recipient's birthday as he listed it on his welfare records to be used in countering a claim which he had made against the company. Several other similar cases are cited in which confidential files are subpoenaed and disclosure is successfully sought for the purpose of civil litigation.

However, in jurisdictions wherein the disclosure statute forbade the issuance of a subpoena for such information unless the litigation was directly connected with the administration of welfare assistance, the courts have generally denied access to the files.

In State v. Lender (1963), 266 Minn. 561, 124 N.W.2d 355, welfare files were sought by the defendant in an action to determine the paternity of an illegitimate child. The statute, similar to the one in South Carolina, forbade disclosure when such release would be detrimental to the public interest. But the court allowed the defendant access to the files. However, where the disclosure regulation forbade release except to the public officials specifically set down in the statute, access was denied to a paternity defendant.

APPENDIX 4 (Continued)

MEMORANDUM  
July 7, 1977  
PAGE FOUR

Courts have ruled both for and against disclosure in situations where welfare records were sought for use in criminal actions. State ex rel. State v. Church (1949), 35 Wash. 2d 170, 211 P.2d 701, is a case wherein the defendant was granted access. The disclosure statute in that situation prohibited voluntary release to all but officials directly connected with the welfare program. However, the courts have denied access to criminal defendants where the disclosure statute forbade any release of such files for any use except purposes directly connected with welfare administration.

The annotation cites one case in which a recipient was denied access to view her own file. In that situation, the statute provided that all such files were confidential. Taxpayers seeking to inspect welfare records have also been denied access [see Coopersberg v. Taylor (1933) 148 Misc. 824, 266 N.Y.S 359, under a statute similar to South Carolina's]. However, under a disclosure statute requiring persons having custody of public records to allow the public inspection at reasonable times, a taxpayer was granted permission to view welfare files, with the exception of old age and dependent children recipients who were statutorily exempted.

Access to welfare files by other public officials and groups has been granted in situations wherein the entity sought the files for investigatory or planning purposes. In those cases, the public officials were not statutorily excluded from the group of persons allowed access, however.

APPENDIX 4 (Continued)

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PAGE FIVE

From examining these cases it is clear that the courts have carefully considered the before mentioned questions in light of the states' disclosure statutes to determine the reasonableness of allowing release of welfare files. It would be appropriate, therefore, for the state Department to use those questions as guidelines in setting its regulations for disclosure.

Finally, with the development of the central computer file, additional safeguards to protect the recipients' right of privacy must be instituted. Helpful guidelines and suggestions for administering such a central file are provided in the Department of Health, Education, and Welfare's Handbook of Public Assistance Administration, as well as numerous law review articles, e.g.

"Computerization of Welfare Recipients: Implications for the Individual and the Right to Privacy," 68 Rutgers Journal of Computers & Law 433. Many of these safeguards are technological in nature which a computer specialist would be more qualified to discuss. However, they would certainly include a "password" system which would be changed periodically for additional security. Such a system requires the introduction of a particular key word to allow access into the various levels of the data banks. For example, one password might be required to allow access to the list of recipients, another key word to get to the amount of aid each receives, still another password for other personal information, etc. Thus only those directly connected with the Department's computer operation staff would have such complete access to personal files. Another security mechanism is the "verification" system, which allows the main

APPENDIX 4 (Continued)

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computer operator to check and verify both input and printout from the terminals. One non-technological device which must be developed, if it has not been instituted already, would be a "need-to-know" limitation of access ladder. Such a ladder of groups and individuals who need access to various sections of the welfare files would clarify for the operator which levels of the data bank he should make available to them.

CONCLUSION:

The express purpose of the legislature in proposing the development of the central computer file of state welfare recipients' records is to make this information more readily available to those people who are currently authorized to have access to the files, and not to expand that group of people. Therefore, as long as the above mentioned security measures are taken and statutory requirements are followed, this new program should present no new problems with disclosure and invasion of privacy. Should the Department of Social Services expand accessibility to new groups, however, each individual situation would have to be scrutinized and balanced with the accompanying intrusion into personal privacy to determine the reasonableness of such an expansion.

APPENDIX 5

NEW YORK MEDICAID MANAGEMENT INFORMATION SYSTEM

PROVIDER MASTER FILE

Data Element Name

- Category of Service - A code defining the category of service rendered (e.g. general inpatient, tuberculosis inpatient, pharmacy, physician, home health).
- Provider Additional Requirements Code - A code identifying the status of a physician in respect to additional requirements for participation in Medicaid.
- Provider Address - Street - The provider's street address.
- Provider Address - City-State - Provider's city and state line of the address.
- Provider Address - Zip Code - Provider's geographic area denoted by the postal zip code.
- Provider Address - Attention Line - The address line that will contain c/o or Apt. number, etc. in the provider's address.
- Provider Application Date - The date the provider applied for participation in the Medicaid program.
- Provider Beginning Date of Service - The date for which the provider is certified to render his/her associated category of service.
- Provider Claim Volume Code - This indicates the number of claims an enrolled Medicaid provider has had processed.
- Provider Control of Medical Facility Code - Ownership of health and medical services facility.
- Provider County Code - A code identifying the county in which the provider's place of business is located.
- Provider Credit Balance Amount - The amount of money owed to the Medicaid program by a provider.
- Provider Credit Balance Date - The last processing date on which an amount is entered in the Provider Credit Balance Amount.
- Provider DEA No. - The license number assigned by the Federal Drug Enforcement Agency authorizing a provider to prescribe controlled substances.
- Provider DEA Number Begin Date - The date the provider's DEA number was issued.
- Provider DEA Number End Date - The date to which the provider's DEA number is effective.
- Provider Employer Identification Number - The number assigned to employers by the Internal Revenue Service for tax reporting purposes.
- Provider Ending Date of Service - The last date on which a provider is determined eligible to render his associated category of service.

APPENDIX 5 (Continued)

- Provider Enrollment Status Begin Date - The date on which the associated Provider Enrollment Status Code becomes effective.
- Provider Enrollment Status Code - A code that indicates a provider's certification status in the Medicaid program.
- Provider Enrollment Status Code End Date - The date on which the associated Provider Enrollment Status Code is terminated.
- Provider Exception Begin Date - The month, day, year from which the provider's exception is recognized.
- Provider Exception End Date - The month, day, year to which a provider's exception will be recognized.
- Provider Exception Indicator - A code used to indicate the necessity of manual review or prior approval for this provider, prior to payment.
- Provider Fiscal Year End Date - The month, day, year on which the provider's fiscal year ends.
- Provider Group Identification Number - The identification number, provider number assigned to the group practice in which an individual provider is a member.
- Provider Identification Number - A unique number assigned by the State to each provider of services in the Medicaid program.
- Provider Last Payment Date - The last date on which a provider (Provider Number) received a payment.
- Provider Last Processing Date - Machine processing date stored in the provider record, updated when record is changed, used on Provider Information Sheet to show date of last update.
- Provider License Begin Date - The date on which the provider's license becomes effective.
- Provider License Number - The number identifying the license issued by the State Licensing Board authorizing a provider to practice within the State.
- Provider License End Date - The date on which the provider's License/Certificate Permit is terminated.
- Provider Licensing Agency Code - A code assigned to each State agency that issues licenses, certificates or permits to providers of services.

APPENDIX 5 (Continued)

- Provider Location Code - The location of the provider within the geopolitical jurisdiction, urban vs. rural.
- Provider Locator Code - A code identifying the other locations of a given provider type who render the same service at more than one location.
- Provider Medicare Number - The provider number assigned to each Medicare provider by the Medicare Processing Agency.
- Provider Medicare Status - A code that indicates whether a provider is Medicare eligible.
- Provider Medicare Status Begin Date - Beginning Date of Medicare status.
- Provider Medicare Status End Date - Ending Date of Medicare status.
- Provider Name - The name of the provider of Medicaid services as used on official records (normally the "doing business as" name).
- Provider Name of Facility Administrator - The full legal name of the administrator of the facility.
- Provider Number of Beds Certified - The count of certified inpatient beds in a health and medical services institution.
- Provider Number Physicians in Group - The number of physicians in a group practice.
- Provider Nursing Home Owners - The owner(s) of a nursing home making application to be a Medicaid Provider. All owners of a nursing home must be listed on the provider application, including those who own obligations secured by the assets of a long term care facility.
- Provider Out of State Code - A code used to indicate providers located out of state.
- Provider Payments YTD - The total amount of payments made to a given provider (Provider No.) since January 1st of the current year.
- Provider Pay to Address - Street - The provider's street address.
- Provider Pay to Address - City-State - Provider's city and state line of the address.
- Provider Pay to Address - Zip Code - Provider's geographic area denoted by the postal zip code.
- Provider Pay to Address - Attention Line - The address line that will contain c/o or Apt. number, etc. in the provider's address.
- Provider Recertification Code - A code designating which month a provider is going to be reviewed for continuance as an eligible provider:

APPENDIX 5 (Continued)

- Provider Rejection Reason Code - A code to indicate the reason the provider is denied participation in the Medicaid program.
- Provider Review Committee Members - Individuals designated as members of professional review committees in institutions, such as, utilization review committee of medical review committee.
- Provider Social Security Number - The account number assigned to individuals by the Social Security Administration.
- Provider Specialty Begin Date - The date the Specialty was verified by the Health Department.
- Provider Specialty Certification Board Code - A code to identify each specialty certification board issuing specialty certifications to physicians.
- Provider Specialty Certification Number - A number assigned to a physician by a specialty certification board.
- Provider Specialty Code - The code identifying a physician's medical specialty.
- Provider Specialty End Date - The date to which a provider is eligible as a specialist.
- Provider Type Code - A code indicating the category of providers rendering health and medical services as approved under the State Medicaid Plan.
- Provider Type of Facility Utilization Review System - A code indicating the type of utilization review system operating in the facility.
- Provider Type of Practice Organization Code - A code identifying the proprietary nature of a provider's practice.



APPENDIX 5 (Continued)

- Rate Amount - Maximum amount that will be paid for the associated Rate Code.
- Rate Amount Begin Date - The month/day/year from which point forward the associated Rate Amount can be paid.
- Rate Amount End Date - The month/day/year from which point forward the associated Rate Amount can not be paid.
- Rate Amount Retroactive - Maximum amount that will be paid retroactively for the associated Rate Amount Begin Date.
- Rate Amount Retroactive Action Date - The month/day/year on which the Rate Amount Retroactive was entered on to the Rate Subfile.
- Rate Benefit Coverage Code - A code indicating whether a service or product is a benefit of the Public Assistance Program, the Medical Assistance only program or both.
- Rate Benefit Coverage Code Begin Date - The month/day/year from which point forward the associated Rate Code is a covered benefit.
- Rate Benefit Coverage Code End Date - The month/day/year from which point forward the associated Rate Code is not a covered benefit.
- Rate Code - A code identifying a medical service or product that utilizes a rate reimbursement technique.
- Rate Code Description - The nomenclature describing a medical service or product that utilizes a rate reimbursement technique.
- Rate Code Retroactive Indicator - A code indicating that the Rate Amount current has been superceded by a Rate Amount Retroactive.
- Rate Inclusion Code - A code indicating what extra services are included in a Nursing Home Rate for the associated period.
- Rate Prior Authorization Code - A code indicating whether or not a service or product is prior authorized for the associated Rate Code.
- Rate Prior Authorization Code Begin Date - The month/day/year that the associated Prior Authorization Code becomes effective.
- Rate Prior Authorization Code End Date - The month/day/year that the associated Prior Authorization Code is no longer effective.
- Rate Subfile Indicator - Indicates a listing of the "Rate Section" of the Provider File is to be produced.
- Rate Type Code - A code identifying a rate as to whether it is by the hour, day, month, visit, etc.

RECIPIENT ELIGIBILITY FILEData Element Name

- Recipient Aid Category - The type of assistance for which this individual has been deemed eligible.
- Recipient Authorization Date - The Recipient Authorization Date is the date that a final decision was arrived at indicating whether this recipient was made eligible or denied.
- Recipient Buy-In Eligibility Status Code/Eligibility Date - Code: The code which indicates that the recipient is entitled to have his premium for Medicare Part B paid for by Medicaid. Date: The date the recipient was eligible for Buy-In as certified by SSA on monthly Buy-In billing tape to the state.
- Recipient Buy-In Premium Amount - The amount of money the state must pay to SSA for the Buy-In coverage for this recipient.
- Recipient Buy-In Premium Date - The date associated with a Buy-In Premium Amount.
- Recipient Case Number - The City-assigned number which uniquely identifies this recipient within a case.
- Recipient Catastrophic Payment Amount - The amount paid a recipient over 21 and less than 65 who is ineligible for full Medical Assistance and care, but who is eligible for payment of bills for inpatient hospitalization.
- Recipient Chronic Care Payment Code/Amount - Code: A code which indicates the method by which a recipient's or legally responsible relative's income is being applied towards his cost of care. Amount: The amount that the recipient must pay toward his/her cost of care.
- Recipient Borough Code - The State-assigned Recipient Borough Code which identifies the local Social Services District currently responsible for this Recipient.
- Recipient Date of Birth - The month, day and year of birth of the individual.
- Recipient Date of Death - The date of a recipient's death.
- Recipient Date of ID Card Issue - A date which indicates when the identification card was issued -- defined as date card was printed.
- Recipient Eligibility Dates (Begin/End) - Begin date: The date that a recipient is eligible to receive Medicaid benefits. End date: The date that a recipient becomes ineligible for Medicaid benefits.
- Recipient Ethnic Code - Recipient Ethnic Identifier is a code which identifies an individual's race.
- Recipient Exception Code - A code identifying types of medical services which require DSS review and approval prior to receipt of the services by the recipient.

APPENDIX 5 (Continued)

- Recipient Excess Income Amount - The amount of income a recipient must spend in a month before he is eligible for medical assistance.
- Recipient Case Family Size - The number of persons in the family of which this recipient is a member.
- Recipient ID Card Number - A computer generated number assigned to each printed Recipient ID Card.
- Recipient Identification Number - A number which uniquely identifies each person; computer-generated and assigned by REF.
- Recipient Institution ID Number - The number which identifies the Medicaid reimbursable institution providing care to the recipient. It is the Provider Identifier.
- Recipient Location Code - A code used to indicate the type of geographic or geopolitical statistical reporting area in which the recipient resides.
- Recipient Medicaid Reimbursement Code - A code identifying special or general reimbursement status pertinent to each individual.
- Recipient Mailing Address/Name - This element contains the names and/or addresses which are associated with the recipient.
- Recipient Medicaid Coverage - A code defining the medical services to which this recipient is entitled.
- Recipient Medicare Code - The code which defines the recipient's coverage-health insurance benefits (Part A) and/or medical insurance benefits (Part B).
- Recipient Name - The legal name of an individual as filled in on the application or other form.
- Recipient One Time Procedure - A code to indicate a procedure that will be performed only once in a recipient's life.
- Recipient Other Insurance Code/Coverage Code - Insurer: The code which identifies the insurance company with whom a recipient has medical coverage (3rd party). Coverage: The code which indicates which major types of medical coverage are available to the recipient.
- Recipient Other Insurance Policy Number - The number assigned by an insurance company from which the recipient has other insurance coverage.
- Recipient Other Insurance Power of Attorney Indicator - A code that indicates that a recipient has given the State the authority to collect other insurance coverage amounts.

APPENDIX 5 (Continued)

- Recipient Medicaid Premium Amount - A premium or similar charge which must be paid by a recipient before they are eligible to receive Medicaid Services.
- Recipient Sex - Sex of the individual.
- Recipient Social Security Account Number - The nine-digit number assigned to the individual by the Social Security Administration as required under Welfare Enumeration.
- Recipient Social Security/Railroad Benefits Claim Number - The Social Security or Railroad Retirement number of the individual on whose earnings benefits are paid or eligibility is established.
- Recipient SSA-Information Exchange Code - A code scheme containing various numerical codes used to describe situations that can occur at SSA or the State.

APPENDIX 6

NETWORK PROVIDER FILE DATA ELEMENTS

<u>ELEMENT NAME</u>	<u>ELEMENT DEFINITION</u>
Legal name	Corporate name or "official name"
Type of agency	The ownership of agency
Source of funding	The primary source upon which the agency relies to provide operating revenues. Its predominate source of supports
Administering agency	Maintains administrative control over a service program or facility
Common name	Another name by which the agency is popularly known - acronym, nickname, local name or abbreviation
Address	All salient identifying geographic data to facilitate the location of a particular agency
Nearest intersection	The closest street crossing to the agency
Census tract	Identifies the provider as to which census tract it is located in
"x" "y" coordinates	Map location of agency to measure distances between two points
Director	The chief executive of an agency
Date agency was established	Date that the agency was founded or began to deliver services
Date of agency closure	Date when agency ceased to exist as an administrative and service entity
Working hours	Those hours and days when the agency is able to provide service
Area served	The geographic area, imposed either by service capacity or regulation, that represents an agency's service area of effective radius of impact. It must be legally or administratively imposed boundary requiring (as an eligibility factor) that those to be served reside within the defined area
Administrative phone	The telephone number that would provide access to supervisory staff and would be called to verify changes

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APPENDIX 6 (Continued)

<u>ELEMENT NAME</u>	<u>ELEMENT DEFINITION</u>
Network contact person	The person administratively responsible for a particular service program within a multi-service agency and who is authorized to inform Network on their agency status changes
Date of last survey	Date when agency was last surveyed
Date last updated	Self-evident
Service sections	Services that an agency provides
Intake phone	The telephone number that a client or worker would normally use to arrange for service
Location to apply	A place other than the previously listed address that a person seeking service must go to apply
After-hours phone	The telephone number that is used after normal working hours
Intake/application process	The usual method by which a client gains entry to the service
Intake/application comments	Comments that further define the intake/application procedure
Intake hours	Those hours and days when the agency does intake
Holidays closed	Those days when an agency does not provide services (aside from "normal" off times)
Parental/child permission required	The parent's/child's permission is required in order to receive service
Documentation required	Official papers or documents that must be presented before a client can be determined eligible for services
Fee description	A description of the fees that are charged for service
Fee structure	Rate structure for services rendered
Third party payments accepted	Those agencies that are acceptable as third party fiscal intermediaries. The agency has been declared eligible for payment from third party payers
Eligibility factors	Those factors that constitute a precondition for receiving services

APPENDIX 6 (Continued)

<u>ELEMENT NAME</u>	<u>ELEMENT DEFINITION</u>
Target group	Groups that an agency determines it can be most beneficial to in service provision
Unacceptable client characteristics	Those characteristics that an agency defines as unacceptable, i.e., the agency will not or cannot serve clients with these characteristics
Income requirements	Does a person have to meet a means test in order to receive services, i.e., is there an income/asset ceiling
Allowable expenditures	The items that may be deducted from income when determining eligibility
Education level	The educational status sufficient or necessary to receive service
Employment status	The individual's specific occupation and/or employment status necessary in order to receive service
Health status	Is a specific diagnosed medical condition required in order to receive services
Date of temporary service discontinuation	Date when a particular service is temporarily discontinued by an agency for some reason, e.g., intake is closed, seasonal variation, etc.
Date expected reopening of service	Self-explanatory
Waiting list	Is there a waiting list for services
Availability	The number of beds, cases, etc. that are presently available at the installation
Capacity	The total facilities that the agency has to handle their caseload
Interpreter/bilingual capacity	The agency has the capacity to communicate in a language other than English
Barrier free	Are buildings accessible to physically handicapped, i.e., are there entrance ramps, passenger elevators, etc
Courtesy parking facilities	Are courtesy parking facilities located nearby
Public bus line access	Are public bus routes located within three to four blocks of the facility

APPENDIX 6 (Continued)

<u>ELEMENT NAME</u>	<u>ELEMENT DEFINITION</u>
License	Mandated permission granted by a competent authority to engage in an activity otherwise unlawful
Certification	Either a document attesting authority or representing that an agency or practitioner meets a certain standard
Who certifies	The name of the organization that certifies the provider



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LAWS OF NEW YORK, 1976  
CHAPTER 639

AN ACT to amend the social services law, in relation to establishing a statewide medical assistance information and payments system, and making an appropriation therefor

Became a law July 21, 1976, with the approval of the Governor. Passed by a majority vote, three-fifths being present.

*The People of the State of New York, represented in Senate and Assembly, do enact as follows:*

Section 1. The legislature hereby finds and declares that the spiraling cost of providing medical assistance to needy persons in this state has created an increasing burden on the state and local governments that cannot long be tolerated, and that it is imperative for the state to utilize modern data processing techniques to begin controlling the rate of increase in medical assistance expenditures and to assure prompt payment of claims for necessary care provided to the truly needy.

The legislature further finds and declares that an economical and efficient method of controlling medical assistance expenditures is through the establishment within the state department of social services of a statewide centralized medical assistance information and payments system capable of receiving and processing information with respect to persons who apply for or have been determined by social services districts to be eligible for medical assistance, and with respect to providers of medical care, services and supplies throughout the state; and which is capable of processing and authorizing payment for claims of such providers for necessary care, services and supplies furnished to eligible persons.

§ 2. The social services law is hereby amended by adding thereto a new section, to be section three hundred sixty-seven-b, to read as follows:

§ 367-b. *Medical assistance information and payment system.* 1. *The department shall design and implement a statewide medical assistance information and payments system for the purpose of providing individual and aggregate data to social services districts to assist them in making basic management decisions, to the department and other state agencies to assist in the administration of the medical assistance program, and to the governor and the legislature as may be necessary to assist in making major administrative and policy decisions affecting such program. Such system shall be designed so as to be capable of the following:*

*a. receiving and processing information relating to the eligibility of each person applying for medical assistance and of issuing a medical assistance identification card to persons determined by a social services official to be eligible for such assistance;*

*b. receiving and processing information relating to each qualified provider of medical assistance furnishing care, services or supplies for which claims for payment are made pursuant to this title;*

*c. receiving and processing, in a form and manner prescribed by the department, all claims for medical care, services and supplies, and making payments for valid claims to providers of medical care, services and supplies on behalf of social services districts;*

*d. maintaining information necessary to allow the department, consistent with the powers and duties of the department of health, to review the appropriateness, scope*

EXPLANATION—Matter in *italics* is new; matter in brackets [ ] is old law to be omitted.

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and duration of medical care, services and supplies provided to any eligible person pursuant to this chapter; and

e. initiating implementation of such a system for the district comprising the city of New York, in a manner compatible with expansion of such system to districts other than the district comprising the city of New York.

2. Consistent with the capabilities of the system established pursuant to subdivision one of this section, the department shall assume payment responsibilities on behalf of social services districts by promulgation of regulations approved by the director of the budget. Such regulations shall specify the providers of medical assistance and the medical care, services and/or supplies for the district or districts for which the department will assume payment responsibilities and the date on which such responsibilities shall be assumed. Such regulations shall be published for comment at least thirty days in advance of their promulgation and shall be filed with the secretary of state at least sixty days in advance of the date of assumption of responsibilities; provided, however, that with respect to a particular district the requirements for advance publications and/or filing may be waived, or the time limits reduced, with the written consent of the district to such waiver or reduction. Providers of medical care and services submit claims to the social services district for all items of care, services and supplies furnished prior to the date of state assumption of payment responsibilities and to the state for all such items furnished subsequent to such date. Such regulations shall also specify a final transition date after which any claiming submitted shall be enforceable by such provider only against the state and shall not be enforceable by such provider against the social services district; provided, however, that the department and the district may enter into a written agreement by which the department agrees on the basis of eligibility information provided by such district to pay claims submitted to such district prior to the final transition date.

3. Upon notice to a social services district in accordance with subdivision two, that the department intends to assume payment responsibilities on behalf of such district, (a) such district shall promptly submit to the department requested information regarding each person who applies for or has been determined eligible for medical assistance and each provider of medical assistance in such district; and (b) notwithstanding the provisions of paragraph (b) of subdivision three of section three hundred sixty-six-a of this chapter, the department shall provide each person found by such district to be eligible for medical assistance under this title with a medical assistance identification card.

4. Information relating to persons applying for or receiving medical assistance shall be considered confidential and shall not be disclosed to persons or agencies other than those considered entitled to such information in accordance with section one hundred thirty-six when such disclosure is necessary for the proper administration of public assistance programs.

5. By no later than forty-five days following the end of each calendar quarter after the second quarter of calendar year nineteen hundred seventy-six, the department shall, until full implementation has been achieved in all social services districts, report to the governor and the legislature regarding the current status of the medical assistance information and payment system, summarizing the progress achieved during the previous quarter and the anticipated major achievements of the succeeding two calendar quarters. The report shall include the current and anticipated overall expenditure and staffing levels for functions relating to the system, and shall specify each district affected or anticipated to be affected during the succeeding two calendar quarters and summarize the manner in which each such district is, or is anticipated to be, affected. In addition, the department shall prepare and submit to the governor and the legislature a special report demonstrating the appropriateness and relative cost-effectiveness of utilizing a fiscal intermediary.

6. Each social services district shall be responsible for paying to the state a share of the state's expenditures for claims of providers of medical assistance attributable to such district, which shall be equal to the share of such expenditures such district would have borne after reimbursement from state and federal funds in accordance with section three hundred sixty-eight-a of this chapter, had the expenditure been made by such district; provided, however, that no district shall be responsible for the state's expenditures for the administrative costs of developing, maintaining or operating the statewide medical assistance information and payment system; and provided, further, that no district shall be responsible for paying to the state any portion of the cost of medical assistance which the department is responsible for furnishing pursuant to section three hundred sixty-five of this chapter.

7. In any case in which the department has made payments for medical assistance on behalf of a social services district pursuant to this section, the commissioner on behalf of the social services official shall be empowered to bring actions to recover the cost of such assistance, pursuant to this subdivision and the provisions of title six of article three of this chapter.

§ 3. Subdivision one of section three hundred sixty-seven-a of such law, as separately amended by chapters four hundred forty-nine and nine hundred forty-five of the laws of nineteen hundred seventy-one, is hereby amended to read as follows:

1. Any inconsistent provision of this chapter or other law notwithstanding, no assignment of the claim of any supplier of medical assistance shall be valid and enforceable as against any social services district or the department, and any payment with respect to any medical assistance shall be made to the person, institution, state department or agency or municipality supplying such medical assistance at rates established by the appropriate social services district and contained in its approved local medical plan, except as otherwise permitted or required by applicable federal and state provisions, including the regulations of the department; provided, however, that for those districts for whom the department has assumed payment responsibilities pursuant to section three hundred sixty-seven-b of this chapter, rates shall be established by the department, except as otherwise required by applicable provisions of federal or state law. A social services official may apply to the department for local variations in rates to be applicable, upon approval by the department, to recipients for whom such district is responsible. Claims for payment shall be made in such form and manner as the department shall determine. Any inconsistent provisions of this title or other law notwithstanding, no employer or organization who has a plan providing care and other medical benefits for persons, whether by insurance or otherwise, shall exclude a person from eligibility, coverage or entitlement to benefits under such plan by reason of the eligibility of such person for medical assistance under this title, or by reason of the fact that such person would except for such plan be eligible for benefits under this title. Where an applicant for or recipient of assistance has health insurance in force covering care and other medical benefits provided under this title, payment or part-payment of the premium for such insurance may also be made when deemed appropriate pursuant to the regulations of the department.

§ 4. This act shall be construed so as to give effect to every other provision of the social services law and any other federal or state law relating to the administration of programs authorized by the social services law, and nothing herein contained shall be interpreted as superseding any other provision of such laws; provided, however, that the provisions of this act shall be given full force and effect notwithstanding any inconsistent provisions of any local law, charter, ordinance or resolution.

§ 5. The sum of one million eight hundred fifty-one thousand dollars (\$1,851,000) or so much thereof as may be necessary, is hereby appropriated to

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the state department of social services from any monies in the state treasury in the general fund not otherwise appropriated, for services and expenses for the design and implementation of a medical assistance information and payment system as authorized by section one of this act. Any federal funds made available to the state as a result of the expenditure of funds hereby appropriated shall be made available to the state department of social services in addition to the sum hereby appropriated for the purpose of such systems development and implementation. The state department of social services is hereby authorized to transfer such funds to other state departments or agencies as may be necessary for such other departments or agencies to develop new or to adapt existing procedures, including claiming, auditing and reporting procedures, to assure compatibility of such procedures with the system to be implemented pursuant to this act. When certified by the department, expenditures shall be paid from the state treasury upon the audit and warrant of the comptroller and subject to the approval of the director of the budget out of funds made available therefor.

§ 6. The provisions of subdivision four of section three hundred sixty-seven-a of the social services law, relating to the utilization of fiscal intermediaries shall be inapplicable to the provisions of this act, and the state commissioner of social services shall not enter into an agreement with a fiscal intermediary for the operation of the medicaid information and payments system authorized by this act; provided, however, that the department may request and accept bids from appropriate organizations for the operation of such system and may take such other acts as may be necessary in order to determine the appropriateness and relative cost-effectiveness of the utilization of fiscal intermediaries for the operation of such system.

§ 7. This act shall take effect immediately.

The Legislature of the }  
STATE OF NEW YORK } ss:

Pursuant to the authority vested in us by section 70-b of the Public Officers Law, we hereby jointly certify that this slip copy of this session law was printed under our direction, and, in accordance with such section is entitled to be read into evidence.

WARREN M. ANDERSON  
*Temporary President of the Senate*

STANLEY STEINGUT  
*Speaker of the Assembly*

## ON LINE AND OFF LINE SYSTEMS: REASONS FOR THE DIFFERENCE IN PROCESSING COSTS

There are several causes for the cost differences between on line and off line processing. First an off line system can be used all night while an on line system is restricted to the normal working hours of its users. Second, because an off line system can build a backlog, it requires only enough computing power to meet the average daily demand.

Meanwhile, the online system must have enough computing power to handle the *peak* daily demand. For it cannot build a backlog of job requests. Instead of building a backlog, the over-utilized on line system restricts the number of incoming requests by ignoring requests until it has time to get to them. In effect then, the over-utilized system reduces its workload by slowing down the work of each individual user. This is why the on line system must have enough capacity to meet the *peak* daily load instead of having only enough capacity to meet the *average* daily load as required by the off line system.

A third cost advantage stems from the fact that a computer uses less of its own resources to manage batch processing than it does for on line processing. As an illustration, imagine that the computer has a dozen jobs to process. With batch processing, the computer will process them one at a time. With on line processing, the computer will process all tasks at the same time. It accomplishes this by first completing a task from one job; then completing a task from another job, and so forth until all jobs are completed. This means that with on line processing, the computer must constantly remember the state of each job. It must also remember which task is to be processed next for each job, as well as where each job and its associated data are stored when the computer is not actually processing them. Obviously, then, the computer requires more memory space to manage on line processing than off line processing. In fact, managing on line processing may consume three to four times as much of the computer's internal memory as managing off line processing. The computer itself has only a limited amount of internal memory capacity.

Because internal memory not consumed by the task of managing processing is available for processing, the same computer can process more jobs with a batch operating system than with an on line operating system. It can process more jobs because it spends relatively less time managing its own internal functions and correlatively more time processing jobs. Consequently, the computer costs are spread over more jobs.

An on line system must be constantly available to its users. An off line system does not have this constraint. If a component of an off line system breaks down for a couple of hours, it is no major catastrophe, the job queue can build until the component is repaired. The on line system does not have this luxury, because if one of its components fail, all of its users are out of business until the system is repaired. Therefore, the on line system requires redundancy in all components that are likely to fail. With redundancy, vulnerable components have a backup so that in the event of failure, the system can switch to the backup component and thereby avoid a major service disruption. This is not to say that complete redundancy is always reasonable. Many times the cost of complete redundancy exceeds the cost of infrequent system failures. In these cases it is reasonable to provide partial redundancy—that is, backup equipment only for the more vulnerable system components. Of course, some on line vendors do not provide adequate redundancy. The result is that their customers suffer excessive service disruptions. The fact that an off line system does not require component redundancy is another reason that off line systems cost less than on line systems.

The foregoing is not an exhaustive discussion of the differences between on line and off line systems but it should provide the user with a general understanding of why on line computer processing costs more than off line computer processing.

.SOURCE: The Congressional Guide to Computers, John D. Croley, 1977, Congressional Management Foundation, 42 pp.